Lectures
ON
INJURIES OF THE HEAD.

Delivered at University College Hospital,

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LECTURE II.

INJURIES OF SCALP—CONCUSSION OF BRAIN—TRUE AND FALSE STUNNING—"DRUNK OR DYING," OR "DRUNK AND DYING."

GENTLEMEN,—It is my intention to direct your attention to a few points in connexion with one of the most important departments of practical surgery—namely, injuries of the head; and in doing so, I have no wish to enter into the subject in a systematic manner, but what I am going to say is purely of a practical and clinical character. The points to which I wish to direct your attention to-day are: wounds of the scalp; the diagnosis between true and false concussion; and whether a patient is drunk or dying, or both. Injuries of the scalp present several peculiarities that place them in a different category to wounds in other parts of the body, and this is because of the scalp being a very compound texture. It has been truly said, that the rind or bark of the head is a texture composed of several tissues blended together; and if we look for a few minutes to its anatomical construction, we shall find how to explain the peculiarities presented by this part of the body. There are three peculiarities to which I wish to direct your attention. The first is, the freedom of the hæmorrhage and the difficulty of arresting it. Secondly, Are wounds of the scalp more frequently followed by erysipelas than wounds in other parts of the body? Thirdly, the reparative power possessed by the scalp.

First, with regard to the question of hæmorrhage. Anybody who has seen an ordinary scalp wound will have noticed how freely it bled. The blood spurts out; the hæmorrhage is profuse and difficult to control. What is the reason of this? If you look to the structure of the scalp, you will find two or three points that will explain it. In the first place, the scalp is extremely vascular; it is supplied with many blood-vessels, which anastomose freely through it, and not only is the vascular supply unusually free and abundant, but these vessels are serpentine. You will see on the scalp of old people, when the fatty matter has become absorbed, the serpentine course of the arteries mapped out very plainly. The amount of vascular supply will explain the hæmorrhage; but to what are we to refer the frequent uncontrollable character of the hæmorrhage? It is to this: these vessels run between the skin and the tendon of the occipito-frontalis; they run in a quantity of very dense granular fat, which lies between the skin and occipito-frontalis. In consequence of lying in this dense granular fat, you will find that these vessels, when divided, do not retract, and they cannot contract; and it is owing to this want of retraction and contraction in consequence of lying in this dense cellulo-adipose tissue that the natural processes for the arrest of hæmorrhage do not readily take place in the scalp. This is a very important point in surgical operations, as for the removal of those little sebaceous tumours which are so common on the heads of some people; for if you are not very careful, and go too deep, you will get profuse hæmorrhage. In operating upon one of these tumours, then, it is better simply to split its upper part, and not to divide it down to the base; then pull it out by its capsule without dividing it completely through. But if you divide the base and detach the two parts separately, it will be very difficult to get it out clean, and may require a dissection when it would otherwise have been unnecessary to do so. In cases of injuries of the scalp, where the hæmorrhage is difficult to arrest, how are we to stop it? We may always stop it at once by acupressure. You can always pass a harelip pin under the bleeding point without any difficulty.

The next point is with regard to the question of erysipelas. It has long been the opinion of surgeons that injuries of the scalp were more subject to erysipelas than wounds of other parts of the body. That is to say, that the accidental circumstances which occasion wounds of the scalp favour erysipelas; but that in the anatomical relations there is no reason why it should be more frequent in the scalp than in other parts of the body. There is, however, one great anatomical peculiarity that leads to the more frequent occurrence of erysipelas here than elsewhere—namely, that the occipito-frontalis tendon lies upon a plane of very loose and lax areolar tissue, which intervenes between it and the pericranium; and if that layer of areolar tissue be laid open, you are very apt indeed to get profuse suppuration there, and you get erysipelas of the scalp—you get a kind of cellulitis, which renders wounds of the scalp that penetrate deeply very dangerous. There is, in point of fact, this difference between erysipelas of the scalp affecting the skin only—the idiopathic,—and that implicating the occipito-frontalis between it and the pericranium—the traumatic. In ordinary idiopathic erysipelas of the scalp death scarcely ever occurs. I think I can scarcely recollect ever having seen a person die from erysipelas of the scalp that was not traumatic. Death of course may occur, but it is extremely rare. It is very different with traumatic erysipelas of the scalp, which is extremely dangerous and very often fatal.

In traumatic erysipelas of the scalp you have erysipelas of the large plane of areolar tissue between the occipito-frontalis and the bone, which is very apt to implicate the brain and its membranes. The erysipelas is not dangerous as far as the skin is concerned, but where this large cellular plane is opened, which is especially liable to happen in wounds. Most wounds of the scalp are somewhat unfortunately situated, so far as the healing process is concerned. When a person is struck upon the head, the blow has a tendency to pass down, leaving a kind of bag downwards with the open end upwards. Hence there is always a tendency to the accumulation of extravasated blood, sometimes to retention of foreign bodies, and eventually pus in that pouch or bag which is the most dependent part of the wound; and it is this that causes the frequent occurrence of erysipelas of the scalp. In order to prevent this, you must make counter-openings, and a drainage-tube may be introduced in order to facilitate the escape of the pus. By making these openings in the early state, you will find the tendency to cellulitis and erysipelas of the scalp is very materially lessened. It has been suggested that the application of sutures tends to produce erysipelas, and it is so; but it is not the mere introduction of the stitch, for it is absurd to think that the introduction of a few stitches into the edges of a great laceration could increase materially, if at all, the tendency to erysipelas, and they do not do so. I believe there is no more danger in passing a stitch through the scalp than in passing a stitch through any other part of the body. The mere introduction of sutures through the scalp does not occasion erysipelas. You may pass sutures round a nævus, and you never get erysipelas. But they do cause erysipelas indirectly, for by stitching up the scalp you stitch up the mouth of the bag, and prevent the drainage and escape of blood from it. Stitches should not be used in these cases unless there is a free drainage, and then there can be no objection whatever to a few stitches being introduced to keep the lips of the wound together. It depends entirely upon how you treat the bag itself: if you close the mouth, you do an infinity of harm; if you open the pouch as well from the bottom and drain it, then the stitches do good rather than harm. It is usual in these cases to bandage the whole of the head, and you will see in some books on surgery very complicated and artistic methods depicted to cover the head with a bandage like a nightcap. These things are not only useless—they are worse than useless, for they are dangerous. You cannot compress the scalp accurately against the skull in the way that these are directed to be applied. They merely keep up pressure, and are quite useless so far as support is concerned. Besides this they are injurious by heating the scalp and preventing the free drainage of pus &c. I should advise you to see that the wound is well drained, and when it is thoroughly well drained, it may be brought well together above the drainage-hole.

There is a condition which is very apt to follow when this areolar plane is opened, and bagging of inflammatory products is allowed to take place, and which is very apt to

be mistaken for erysipelas, and that is abscess. The diagnosis is not easy. In both cases you will have the eyelids puffed, and a puffy swelling of the scalp at the same time; but there are two or three points, attention to which will enable the diagnosis to be readily made. The first point is that in erysipelas you always get the ears involved; they become red, swollen, and covered with blebs. In abscess this does not happen. In abscess the presence of fluctuation is always determined by the attachments of the occipito-frontalis muscle. The swelling presents itself at three points—namely (1) posteriorly, at the attachment to the superior curved line of the occipital bone, and the pus will gravitate down and form a bag there, but it will not go any lower in the neck; (2) if it comes to the side of the scalp, it will present above the mastoid process, and on a level with the zygoma, but it will not descend below the zygoma; and (3) if it comes to the front, in consequence of the fibres of the occipito-frontalis being blended with those of the corrugator supercilii and the orbicularis palpebrarum—it will have a tendency to gravitate into the eyelids and form a bag, and it is in one of these situations that these bags of pus will develop themselves, lying between the occipito-frontalis and skull.

Well, now, there is this third point of special interest in injuries of the scalp, and that is the reparative power that is evinced by the scalp, which is very remarkable. The scalp stands in quite a different category to other portions of the integument. You may remove portions of the scalp, and cicatrisation takes place very rapidly indeed. This will explain the good results that follow when a nose is made from the scalp by the Indian operation. Although a large portion of the scalp is turned over from the forehead, very little scar is left. In this operation we have a good illustration of the reparative power possessed by the scalp. I have seen, in a person who had fallen into the fire in an epileptic fit, half the scalp removed from the side of the head, and a portion of bone detached by a process of exfoliation. But the wound contracted, and left a firm cicatrix. Some years ago I removed a very large epithelioma, considerably larger than the palm of the hand, from the side of the head of an elderly lady, a patient of Mr. Lunn, of Hull. I removed it with the galvanic écraseur. A portion of the bone that was touched with the hot wire exfoliated, but the wound, which was very extensive, cicatrised well.

In injuries of the scalp it very commonly indeed happens that the brain is more or less injured, for it is seldom that a person gets a blow upon the head so as to lacerate or seriously contuse the scalp without the brain being injured at the same time. The patient in this case is stunned: to use the popular expression, "knocked silly;" to use the surgical expression, suffering from concussion. I am going to mention one or two points in practical connexion with this condition. In the first place, if a person has been stunned, it is a very important thing in his after-history. The total annihilation of voluntary motion and of sensation indicates that a deep impression has been made on the nervous system. We know, for instance, what happens to a person who has had an epileptic seizure, however slight it may be. He may lose consciousness only for a minute, and have a slight twitch somewhere in the body, but yet the whole of that man's life is completely changed; he becomes a different being, socially, physically, and morally. It is the same if a person has been stunned, and it is very difficult to say what may happen after that occurrence. Stunning, with complete loss of consciousness, is a very serious matter indeed. It indicates commotion of the brain-substance, and great evils may follow. It is most important, therefore, to recognise *true* stunning in contradistinction to *false* stunning. Let me give an illustration. A person is in a carriage accident: the horses run away; he is thrown off the box, and pitches upon his head. He is picked up in an unconscious state. The man is stunned, there is no question about it. When he recovers you ask him what he remembers about the accident, but he does not remember anything about it. There is a complete gap in his memory; he forgets everything up to a minute or two before the accident, and there is often no recollection of the very circumstance that preceded the accident, and this is a very remarkable psychological condition. He forgets some of the events *immediately antecedent* to his becoming unconscious. This is a most remarkable mental phenomenon. The patient does not only forget the circumstances of the accident, but also those that immediately preceded it. The horses ran away, and the man is pitched upon his head, and the last thing he recollects is that a pig, or something of that kind, ran across the road, and frightened his horses. He does not recollect what took place between the time when the horses took fright and the time that he received the injury which rendered him unconscious. But a lady is in the carriage, and she is thrown out. She is also, after a time, picked up in a state of utter prostration, not injured about the head, and with no serious injury about the body. She falls back into the arms of those who pick her up, and is carried into a neighbouring house in a state of unconsciousness. Here restoratives are applied, and after a time she recovers herself. The two people look alike, but in reality the condition is quite different. The woman not only recollects everything that has occurred throughout the whole of the period until after the danger is over, but the minutest circumstances are strongly, and remain deeply, impressed on her mind; and then, when all danger has past, she loses her consciousness; she faints, in fact. That is not a condition of concussion, or of true stunning. The two cases are quite different, not only in their immediate characters, but will probably be so in their remoter results, and should not be confounded. The psychological phenomena that follow the recovery from concussion are very curious, and they are very important. There was a man in Ward 1 some years ago who had a head injury. He would give the story of his accident in the most distinct, intelligible, and circumstantial manner, but he would vary that story according to the wish and suggestions of the inquirer, and he would tell half a dozen different stories in a very short time, and so he would give any series of stories, and all in the most circumstantial manner. This is very curious, and it is very important in a medico-legal view, because if this man had been brought up before a magistrate he might have said that somebody had struck him on the head, and he would easily have been led to give a most circumstantial detail of an assault that never occurred and that would have been a pure fiction. It is a very curious mental study to trace the phenomena that sometimes follow these injuries of the head.

There is another condition to which I wish briefly to direct your attention, and it is not so much for concussion that it may be mistaken, but it is a condition which is liable to be confounded with compression. It sometimes happens that a person is picked up in the street with an injury of the head, and the question arises—Is this man drunk, or is he insensible from the injury that he has sustained?—in fact, the question which agitated the public mind some time ago: "Is he drunk or dying?" But it would be more correct sometimes to say that he is both—that he is drunk *and* dying too. It is very important indeed to determine when a man is simply drunk, although he may be "dead-drunk." It is usually not very difficult to make the diagnosis. His friends know what has occurred to him, and he smells strongly of drink, and is in that helpless condition which you see if a person is suffering from alcoholic poisoning; but if associated with this state there is an injury—in going out of the public-house he reels and falls down, and is picked up with a great cut in his head,—then the question arises: Is this man drunk, or is he suffering from head injury, or a combination of the two? The difficulty in answering this question is extremely great—in fact, I believe it is often impossible; and the only method of giving an answer to this question is by waiting and seeing the result of what happens. You will find in this as well as in other cases of surgery that time is the best diagnostician after all—that what is most difficult at the moment will become clear if you allow a few hours, days, or weeks to elapse. If you are called to a person with a head injury, who smells of drink, and has been undoubtedly drinking, and is more or less suffering from alcoholic poisoning, it will be the wisest plan to examine him most carefully to see if there is any injury. If there is, the question of diagnosis must be reserved. He may be relieved of his alcohol by means of the stomach-pump, &c., and then wait and see what happens. It not uncommonly happens that people are brought to the hospital in this state, and are sent away as only drunk. They may be drunk, but at the same time they may be suffering from a very serious injury. Some years ago I was called to a gentleman who had been brought to a hospital in a state of semi-insensibility, with a bruise on the forehead. He had evidently been "dining out," or something of that kind, and was looked upon as being drunk, and was sent home in that condition. My friend who had been called in asked me to see him, and we diagnosed that he had a fracture of the skull. He died, and the post-mortem con-

firmed our diagnosis, for there was an extensive fracture across the base of the skull. These cases are very apt indeed to happen in ordinary hospital practice, and there is not one absolute method of diagnosis. I will not go into questions as to the state of the pupils, or of an epileptiform state, which in a person suffering from drink I believe to be all futile. It is quite impossible to effect an immediate and at the same time an accurate diagnosis in these cases, and the only thing to be done is this—to try to relieve him of the alcohol by the stomach-pump, and to wait; let him lie by, in order to see what the result is. For this purpose there ought to be a separate ward, and I have urged it upon the authorities of this hospital repeatedly, so that the surgeon may wait, and see the result. The house-surgeon is called up in the early morning, not perhaps in the happiest state of mind, and the man is brought in between two policemen, reeling, and smelling of drink. The house-surgeon is very apt, though in doing so he is greatly to blame, to take the opinion suggested to him, and send him away as drunk and incapable; or he may make a very careful examination, but how can he tell that that man has not a lacerated liver, or a ruptured meningeal artery, when he is possibly drunk as well as injured? Such a patient as that should be taken into the hospital, but he could not be taken into the general wards, for that would be very unfair to the other patients, and might be very dangerous to them by the disturbance he would create. If there was a small ward to put him in, then there would be no eventual difficulty in the diagnosis; and the patient would be placed in a condition of safety such as humanity would suggest for him. Such a ward is imperatively necessary in all hospitals for two reasons: first, for the safety of the patient; and, secondly, to free the house-surgeon of the responsibility of these cases, because it is impossible for any physician or surgeon to discover off-hand and say what the exact cause of the symptoms of coma or compression of the brain may be. This diagnostic point cannot be established by any practitioner, however skilled and however experienced, unless you give him time. With regard to the actual condition of the brain in many of these cases of extreme concussion, it is difficult to say what is the state of things. In those cases that have died, small extravasations of blood have been found; but in those cases that have recovered, it is very uncertain what condition the brain is in. You must recollect, gentlemen, that what you see in the dead-house is a condition of things no longer compatible with life; for you never see in the dead-house a condition of things such as exists in the living body, and that can be recovered from. There is very little known of the actual pathology of concussion of the brain. You may get total annihilation of mental power without any physical lesion or morbid condition of any kind; just as you annihilate the power of a magnet by giving it a sharp blow with a hammer. So in many cases of concussion it is doubtful whether any visible effect is produced on the substance of the brain.

ON CHANGES IN THE NERVOUS SYSTEM IN DIABETES.

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I WILL not longer delay to notice a paper in the last number of the Guy's Hospital Reports, in which some observations I made several years ago upon the state of the nervous centres in diabetes are criticised not only severely, but murderously. I had hoped for an opportunity of adding some fresh facts to those already accumulated, but have waited in vain. The paper I refer to has the joint authorship of Drs. F. Taylor and Goodhart. These gentlemen, following somewhat closely in my track, have come in general terms to the conclusion that of the appearances I described as morbid, some had absolutely no material foundation, while those which were not wholly visionary were so far delusive that they represented the condition not of disease but of health. Other lesions besides those of diabetes are discredited in passing, and other observers besides myself come within the whiff and wind of that fell sword whose two-handed sweep descends mainly upon me.

Dr. Coats's recent paper at the Medico-Chirurgical Society is so apt a reassertion and continuation of what has been done with regard to tetanus and hydrophobia, that Dr. Clifford Allbutt, who is especially pointed to, may be saved the necessity of reply. As to diabetes, I may, pending further researches, say a few words.

Perhaps no branch of pathological inquiry is now advancing so rapidly as that which relates to the nervous system; new methods are bringing new results, to be themselves superseded and possibly their results modified by newer modes of proceeding. The observations now in question were made some years ago, and may well need revision; it is at first a little startling to find that they are regarded as a simple mixture of misstatement and misconception, but this is apparently the conviction of painstaking inquirers, and is not to be too hastily rejected.

Venturing as I was upon comparatively untrodden ground, and in anticipation of such criticisms as those upon which I am observing, I was awake to the possibility of mistaking natural appearances or the results of reagents for those of disease. Every observation was checked by comparison with healthy sections taken from the same place and treated in the same manner. Thus, if I have fallen into this error, it has not been that I did not guard against it. I am far from presuming that there are no points, particularly in the earlier descriptions, which need amendment. In writing the book five years after the paper, I was not only provided with a number of new preparations, but I re-examined every old one. The general results of the former observations were confirmed and extended by the later; while some points in the earlier were found, in the light of increasing experience, to need modification. One of these has been selected for attack by Drs. Taylor and Goodhart, and, as I retired from this position three years ago, I have no intention of defending it now. I described a cavity in the pons Varolii which naturally lodges a process of pia mater as having its "edges fringed with broken vessels and nerve-fibres." The contents of the space were distinctly morbid—to them I shall revert; but I thought, as I went on, that I had too hastily assumed that the vessels had been divided by disease, and accordingly so far modified the description. I indeed explicitly state in the later publication, in reference to the evidence which such cavities afford of hæmorrhage, that "the escape appeared to be rather of corpuscles by migration than of blood in bulk by rupture." As to the precise drawing upon which Drs. Taylor and Goodhart comment, it is in the later work simply described as representing a cavity "containing arteries and nervous detritus." With regard, also, to the deep indents which lie on each side of the medulla in contact with the facial nerve, I was always careful, and that with an iteration imitated by Drs. Taylor and Goodhart, to describe them as natural recesses which give lodgment to pia mater; but I may not, particularly in the earlier observations, have allowed enough for the variations of size and appearance which they naturally present, so that I may have described them as morbidly increased when they were not so. Irrespective of size, however, their contents sometimes show them to be the seats of disease; I have seen extravasated blood in them, and also found the adjoining tissue to be densely spotted with escaped corpuscles. I do not think I have anything further to concede. Perhaps in the earlier communication I may have dwelt too much upon the arterial fulness, but I do not think I did so in the more recent. Having thus made confession, I am prepared to join battle with a conscience void of offence.

The general result I came to amounted to the finding in the diabetic brain of various perivascular lesions, none of which were asserted as being peculiar to diabetes, though, with certain variations in place and degree, they were constantly to be found with it. Far from asserting any of these lesions to be peculiar to diabetes, I have frequently insisted on their similarity to those found in certain other nervous disorders, and urged the claims of alliance which, on this ground, diabetes has with other diseases, the rough issues of which are to be found in the perivascular canals of the nervous centres. When, therefore, my critics justly remark that certain changes which they are compelled to allow to be morbid, such as the cribriform state of the white matter—I

will say nothing now about miliary sclerosis,—are to be found also in other diseased states, they confirm not only my observations but the interpretation I have put upon them.

To pass to the details of the criticism, and first to those relating to the naked-eye appearances, I state in the work which has been referred to that "the brain of diabetics is almost invariably free from tangible or obvious disease, and to rough examination natural." I then proceed to relate that I had observed with the naked eye pores in cribriform arrangement, and, especially in hardened sections, cavities not as wide as a church door, but at their largest such as would hold a pea. Upon this say Drs. Taylor and Goodhart, "If it be true, as Dr. Dickinson states, that 'cavities were thus produced often large enough to be striking objects even without the microscope,' it is, to say the least, remarkable that no one has insisted on such appearances hitherto." To pass over the gratifying tribute to my veracity, I will but observe that appearances not obvious to rough examination may escape notice when not minutely sought for. To say again that I actually saw holes (whatever their nature) where I say I did, must be either superfluous or useless. But the artist is in the plot as a circumstantial witness, and of the preparations most still remain to speak for themselves. I think that if any unprejudiced person will bring his unassisted vision to bear upon some of the sections, he will allow that cavities are sometimes to be seen which "are striking objects even without the microscope." Drs. Taylor and Goodhart, indeed, allow that they have themselves seen the sieve-like perforations of the white matter, a condition which can be recognised in the fresh state without preparation or instrument.

With regard to the contents of these cavities. I described them in some cases as gelatinous, and, as I had not seen anything of the sort in the healthy brain, I inferred them to be morbid. According to Drs. Taylor and Goodhart, certain specified cavities which, closely following my description, these gentlemen describe as containing processes of pia mater, "can be cut across so as to represent apertures containing gelatinous material—that is, vessels and areolar (pia mater) tissue." The material in question is, therefore, either an optical illusion or a natural state of the pia mater. But such criticism is curiously wide of the mark. A reference to the woodcuts I have given at p. 39 in my book will be sufficient to convince anyone who will allow them to be genuine that the gelatinous substance is neither an unreality nor an ordinary state of the healthy structures. I have depicted it in a cavity, probably of perivascular origin, as large as the letter "o" in a LANCET leader, which existed with several others in one of the bodies underneath the floor of the lateral ventricle. It is bulky, tangible, and distinct. Whatever doubts may apply to its nature, none are possible as to its existence, save only that, in common probably with many other natural objects, it has not been seen by Drs. Taylor and Goodhart. The material in question might, from its position, be either an exudation from the bloodvessels or an alteration of the surrounding tissue. Its structure, however, is conclusive of its origin, for the attenuated but distinct remains of nervous tissue can be traced within it. The point thus presents itself—and I would suggest this as the only one left to Drs. Taylor and Goodhart—whether this modification of tissue has taken place during life or after death. But the change is constant in its anatomical relations; it is essentially perivascular; it is sometimes mixed with an undoubtedly morbid accumulation of hæmatine; and, lastly, it is not to be found in the healthy nervous centres. It is therefore vital, morbid, and begotten, like much else that is both, between blood and nerve. Mr. W. H. Kesteven, who has kindly examined some of my slides, thinks that the change is due to a solution or partial atrophy of the nervous structure, by the action of the adjacent vessel, and, whether by atrophy or solution, it is apparent that the position of the vessel determines the process. Mr. Kesteven tells me that he has found the same material in the cord in a case of puerperal insanity. But to Drs. Taylor and Goodhart these considerations must seem as idle as speculations upon the anatomy of a ghost. I may observe parenthetically that the case I have just referred to as showing to an exceptional degree the results of the destruction of cerebral tissue was one of rare severity, and, what is of interest from the nervous point of view, was attended with a discharge of phosphate of lime by the urine remarkable even for diabetes. It was in at least ten times the normal amount.

(To be concluded.)

EXTIRPATION OF THE LARYNX.

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(Concluded from vol. ii. 1877, p. 832.)

THE former notice of this case carried it forward to the thirteenth day after the operation. Four months have now elapsed since I removed the larynx, and the patient has returned to his home in a satisfactory state. I wish to detail the further steps which were necessary in order to bring about this result.

As soon as the wound appeared to be sufficiently contracted, I tried to introduce the voice-tube sent to me by H. Reiner, of Vienna. This apparatus (Fig. 1) consists of two tubes, one of which (B) passes into the open trachea, while the other (A), fitting into the tube B, passes upwards to the epiglottis. Into the upper tube (A) slides a silver case containing a plate with a vibrating reed. The anterior opening of the apparatus is closed by the button (C), and the current of air is directed past the reed, and through the apertures in the tubes. As the upward current impinges on the reed, the latter is thrown into vibrations, and a continuous musical note is produced, which is then modulated into vowels and consonants by the mouth.

FIG. 1.[1]

Sectional view of Gassenbauer's voice-tube (full size).
A, Upper tube, which passes up towards the mouth.
B, Lower tube, which enters the trachea. C, Button with reed-plate attached.

At this stage several difficulties appeared. In the first place, the tube, owing to its shape and its small size, did not fit the wound, and the reed being besides rather stiff and difficult to sound, the apparatus was laid aside. I found also that the upper part of the wound had contracted very much, so that I could scarcely push the tip of my little finger into it. The enlargement of the upper part of the passage was therefore the first point to be attended to, and this I effected by inserting my finger into it for a short time daily, until in a week or so I was able to pass my middle finger from the wound in the neck up into the fauces, and to leave it in the channel for a minute or two. This upper end of the wound was very sensitive, possibly owing to the presence of the end twigs of the superior laryngeal nerve, and the introduction of the finger was followed by violent fits of spasmodic coughing, accompanied by a sort of suffocative spasm. This happened in spite of the fact that, the upper end of the trachea being wide open, the air had free access to the lungs, and it was probably to be explained as a reflex spasm set up by irritation of the nerves in the upper end of the wound.

While this dilatation was in progress, various attempts were made to procure a tube which would fit the peculiar shape of the wound. In this task I was indebted to Dr. Irvine and Mr. Foulds (dentist) for invaluable assistance. Dr. Irvine having suggested and embodied in a rough model the idea of reversing the relative position of the tubes, Mr.

[1] These woodcuts were drawn and cut by Mr. Nisbet, of St. Vincent-street.

Foulds produced a tube (Fig. 2) which is at once light, smooth, easy to wear, and close-fitting to the wound. From the accompanying sketch it will be seen that this voice-tube

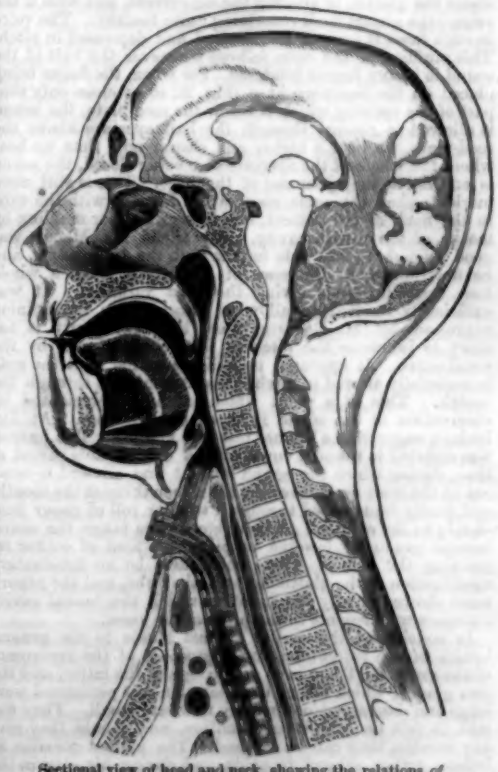
FIG. 2.

Sectional view of voice-tube used by the patient (full size). A, Upper tube. B, Lower tube slipping into the upper tube and holding the reed-plate and button (C).

is based on the plan of that of Gussenbauer, with essential modifications. For example, the lower tube slips into the upper one, thus permitting the upper tube, which is the more difficult to insert, to be put first into its position in the wound. And, again, at Mr. Foulds' suggestion, the reed-plate is not enclosed in a silver case, but is simply pushed into a groove in the sides of the lower tube, like a drawer. When pushed home, the reed-plate slopes downwards, and the current of air from the lungs impinges upon the free end of the vibrating reed, instead of being reflected along it from the root, as in Gussenbauer's tube. This is found to give a better note than that produced by Gussenbauer's arrangement. I need not detail all the difficulties met with in fitting this tube to the wound. One of these was the determination of the length of the upper tube. The epiglottis having been left attached to the root of the tongue, it was necessary to leave the tube of just such a length as would allow the epiglottis to close over it in swallowing, and would at the same time keep the mouth end of the wound patent. The tendency of the uppermost limit of the wound to close over was for a time very troublesome, and interfered with the clearness of the voice in a capricious manner; while, if, on the other hand, too long a tube were used, there was excessive irritation and salivation, the most of the saliva finding its way into the trachea, where it excited hard, painful coughing. The sketch (Fig. 3) shows the position of the tube in the throat, and the length now fixed on as the best for the upper end. For precaution's sake, a cork is inserted into the upper end of the tube at meal-times, any accidental spasms of coughing being undesirable in the suspicious state of the apex of the right lung, alluded to in my former paper. But the amount of salivation having greatly diminished, the use of the cork is now less necessary.

The question of the formation of the reed was also of much interest. The reed in the Vienna instrument was made of thin German silver plate, and those which Mr. Foulds at first made were of brass. Dr. Irvine found, in the course of experiment, that soft vulcanite answered well for the purpose; and on the model of the one so made the patient himself has been able to manufacture reeds of various materials—ivory, horn, vulcanite, cane, &c.—with which he amuses himself. I had some reeds of German silver and steel made by a jeweller. Latterly, Mr. Foulds has made one of an alloy of silver and brass, which gives the richest tone of all, and which is the favourite one with the patient owing to the ease with which it is vibrated. The patient has thus a large number of voices at command; and

FIG. 3.



Sectional view of head and neck, showing the relations of the voice-tube to the soft parts, and the manner in which it replaces the larynx. (Modified after Braune's plates.)

it is very instructive to watch the variations in the timbre or quality of the voice in changing from one reed to the other. The softest and, perhaps, the most natural notes are given by the non-metallic reeds, those made of metal giving a more ringing tone. With the same buccal cavity, we have a tenor or baritone quality imparted to the voice by the use of one or other of the reeds, which fact goes to confirm the opinion already expressed by authorities that the timbre of the human voice depends as much upon the density, elasticity, and other qualities of the vocal cords as on the accentuation of particular sound waves in the buccal cavity.

The articulation of the patient with this apparatus is wonderful. Except for the monotony, it cannot be distinguished from the natural voice. The vowels are perfectly clear and distinct, both in whispering with the reed out and in intoning with the reed in the tube; proving, if proof were wanted, that the vowels are the product of changes in the shape of the buccal cavity, and are not formed by alterations of the glottis. I had the pleasure of showing the patient to Professors Sir William Thomson, M'Kendrick, Cleiland, Graham Bell, and others at the University (on November 13th), to the Pathological and Clinical Society (Nov. 13th), and to the Philosophical Society of Glasgow (Nov. 21st), and on these occasions he was able to convince the gentlemen present of the reality of his vocal powers. More recently, having become more expert at the manufacture of reeds, my patient has made for himself a vulcanite reed with which he can positively roar. This reed requires, of course, a stronger current of air to make it vibrate than the others require, they in turn vibrating only in an air-current of a certain strength. All the reeds remain silent in ordinary breathing.

It is notable that the sound of the voice is interfered with by anything which even partially closes the upper end of the tube. If the tube, for example, be too short, and the soft

parts fold themselves over the upper end, the voice is liable to be suddenly interrupted; while if the epiglottis lie far back over the end of the tube the pitch of the note is lowered and the tone itself damped and rendered less ringing. This seems akin to the effect of large tonsils, or other swelling above the glottis, in altering the air-current, and with it the voice—the glottis itself remaining quite healthy. The voice in such cases is more or less muffled and depressed in pitch. This muffling of the note follows whenever the exit of the sound is in any degree hindered. For when, the finger being placed on the aperture at C (Fig. 2), so as close only that part of the opening which is below the reed-plate, the sound is allowed to emerge through the half aperture above the reed-plate, we hear a higher and clearer note than we hear when, the whole of the aperture at C being closed, the sound is emitted at the upper end of the tube. This is still more marked when the same observation is made with the tube in the neck of the patient, indicating a further muffling by means of the mouth cavity. My friend Mr. Moodie was good enough to test this for me with the tuning-fork, and he determined a difference of a half, or even a whole tone, metallic reeds giving the least variation. It was sufficiently marked to allow of dissent from the opinion expressed by M. Gavarret that the oral cavity is too short to influence the pitch of the note produced by the vocal cords. It appeared to indicate rather that the note is materially altered in pitch in its transmission through the mouth. This is a point which might be elucidated by observation of the sound in cases of cut-throat. At Dr. Irvine's suggestion a further test was applied. The patient was directed to sound a vowel over a considerable period of time, during which the sound was at first allowed to come out at the front aperture of the tube, then through the mouth, and finally transmitted through a tubular roll of paper held closely to the mouth. As these steps were taken the sound became gradually lowered in pitch, the reed of course remaining the same. There could here be no involuntary modification of the glottis to suit the tube, and the experiment showed vividly the function which the buccal cavity exercises with respect to the pitch of the voice.

In concluding this notice I must allude to the general health of the patient and to the prospect of the recurrence of the growth. There is as yet no sign of the latter, and the two glands, which before the operation was performed were large and dangerous-looking, are now very small. They can still be felt on careful examination, and should they give any trouble, they can be excised. The patient remains as before, rather subject to colds, and during his stay in the Nursing Home there was a sharp attack of bronchitis in the right lung, with crepitant râles at the apex and half way down the lung, with an evening temperature of 99° to 101°. With this there were slight sweatings at night; but after causing us much anxiety for a fortnight, this passed away. The temperature is now nearly normal, betraying an occasional tendency to an evening rise of half a degree or so. There is just a trace of sweating at night at rare intervals. To physical examination the right lung is as sound as it has been since I first saw the patient, an opinion confirmed by Dr. Finlayson, who has kindly examined the chest from time to time.

Glasgow.

ON THE USE AND ABUSE OF PESSARIES.

BY GEO. GRANVILLE BANTOCK, M.D., F.R.C.S. ED.,
SURGEON TO THE SAMARITAN FREE HOSPITAL.

So various are the views held as to the value of mechanical appliances in the treatment of uterine deviations, that while, on the one hand, many eminent gynæcologists regard pessaries with great favour, as very efficient aids in the treatment of deviations, and the morbid conditions so frequently associated with, if not actually dependent on, them, others equally eminent are as much opposed to them, attributing to their use untold mischief.

At the Manchester meeting of the British Medical Association Dr. Braxton Hicks read a paper "On Hæmorrhage from the Retroflected Uterus, and its Treatment," in which he urged that the weighty and engorged fundus uteri was most relieved by mechanical support, at the same time combating the objections to this mode of treatment, and he quoted cases in illustration. At the same meeting, Dr. Thos. Chambers read a paper "On the Treatment of Uterine Flexions by the Intra-uterine Stem, with Cases." Dr. Henry Bennet "felt bound to state that his whole experience was antagonistic to the doctrines and treatment recorded in the paper read." Dr. Matthews Duncan agreed with Dr. Bennet, adding that "there was a fashion in these matters. Years ago every woman suffering from uterine disease was said to have a dislocated uterus; at a later period no one had any affection of that sort; and now, once more, every woman was getting her uterus dislocated again, and he defied all the doctors in Christendom to put it right." Such is the report furnished by the *Journal*, and I presume it has met with Dr. Duncan's approval. Now to quote this exaggerated misrepresentation is to refute it.

During a discussion at the Gynæcological Society of New York, Dr. Atlee, of Philadelphia, observed that he had had no experience in the *introduction of pessaries*, but that he had had a large experience in their withdrawal. He had been able to remove the symptoms in most of his patients without the use of pessaries, and when that could be done he was satisfied without their use. With the *uterus and pelvic organs in a healthy condition* a change in the position of the uterus was of no significance whatever, and there was no need of an instrument to keep it in a certain position. (The italics are mine.) Now, when Dr. Atlee tells us that he has had no experience in the introduction of pessaries, he at once puts himself out of court, and when he states that he has been able to remove the symptoms in most of his patients without the use of pessaries the obvious reply is that if he had used the pessary in the rebellious cases still greater success would have attended his treatment. Again, when he says that with the uterus and pelvic organs in a healthy condition (and I would add *and the patient free from symptoms*) a change in the position of the organ is of no significance whatever, he states a self-evident proposition. I have taken part in frequent discussions on this subject, and I am unable to recall a single instance of any one contesting this point. For what is the object of all treatment? It is *to relieve symptoms*, and the relief of symptoms is the measure of the efficacy of all treatment. A man with a dislocated shoulder, which does not interfere with the full use of his arm, would not trouble himself about reduction any more than a woman with a dislocated uterus, which produces no symptoms, would apply for relief. Is it nothing to be able to say that a woman who walks into your consulting-room, complaining of pain in the sacral region, and an undefined feeling of "bearing down" in the pelvis, which interferes with her walking, is aggravated by a fæcal evacuation, and prohibits sexual relations, in a few minutes after the application of a pessary, walks with comfort, tells you she is now free from pain, and goes home to find that she can discharge all her duties with satisfaction? Can the same be said of any other method of treatment—the frequent rectifications of the uterus by means of the sound, or by the fingers, the repeated scarifications and leechings, and the two or three years' treatment of Dr. Henry Bennet?

CASE 1.—About seven years ago I was asked by a friend to see his wife, who for months had been almost confined to her bed. She had had two children, and had never been well since her last confinement. I was told that she had been for several months under the care of Dr. Matthews Duncan, in Edinburgh, but without any benefit. On examination I found the uterus very large, measuring about three inches and a half in its cavity, and so retroverted that the os uteri pointed to the upper part of the vaginal outlet. The left ovary could be felt most distinctly prolapsed into the left side of the utero-rectal cul de sac, and it was very tender to the touch. The right could also be felt by bimanual examination scarcely lower than its normal position. I was also told that for many months the patient did little more than pass from her bedroom, usually in the evening, to the couch in the sitting-room, so much pain did the erect position, or the act of walking, cause her. There was no leucorrhœa nor excoriation, nor could I find any cause for the symptoms other than the retroversion of the uterus and the consequent prolapsus of the ovary. I at once replaced the uterus by means of the sound, and while it was thus kept in position I introduced a Hodge's pessary. The sound indicated that the pessary was not efficient. I therefore removed it, and passed a larger instrument, with satisfactory result. The ovary was no longer prolapsed. I asked her to get out of bed while we left the room. This she did

with a sense of great relief, and I bade her good-bye, recommending her not to exert herself much for a few days. I remained a short time in the house in conversation with her husband, and before leaving had the satisfaction of seeing her walk into the room, when she expressed her delight at the success of the treatment. Beyond this nothing was done except the administering of an occasional dose of a saline chalybeate aperient. The patient came to my house two or three times (a distance of four miles) in order that I might be satisfied as to her condition. After several months the instrument was removed, the uterus and ovary were left in normal position, and the patient has continued quite well to this day. The question naturally arises, Why did Dr. Matthews Duncan, with all his experience, afford this patient no relief? And the answer comes that either he failed to recognise the existence of a "dislocated uterus" and ovary, or was not aware of the value of the pessary; and all the physic she swallowed while under his care was at least thrown away.

CASE 2. *Retroversion with menorrhagia.*—In 1871 Mrs. B—— came under my care suffering from severe menorrhagia and dysmenorrhœa for which she had been under medical treatment for several months. She complained of constant pain more or less severe, which so interfered with her walking that it was with great pain and difficulty she made her way to the out-patient department of the Samaritan Free Hospital. Menstruation was excessive in quantity and duration. I found the uterus very much retroverted, body enlarged, cavity measuring about 3¾ inches. The organ was readily replaced by means of the sound, but at once fell back on removing the support. There was tenderness of the body on pressure, great tenderness of the fundus on pressing the sound against it, and a little blood followed the use of the instrument. I at once adjusted a Hodge's pessary with my usual precautions, and the patient went home in great comfort with a prescription for tincture of muriate of iron and liquid extract of ergot, ten minims of each to be taken three times daily. From this time I attended the patient at her own home. She wore the instrument for about nine months, during which time she was able to attend to her household duties; the periods gradually assumed the normal character, assisted, as I believe, by the use of two sponge-tents, and I removed the instrument. This patient is still quite well.

CASE 3.—*Retroversion; severe menorrhagia; Hodge's pessary; subsequent pregnancy.*—Mrs. D——, aged thirty-three, came under my care at the Samaritan Free Hospital in the summer of 1875, the subject of severe menorrhagia, which told its tale in her anæmic appearance, and from which she had suffered since her last (sixth) child about a year and a half ago. She also complained of a constant bearing down, and stated that the loss of blood was very great, and she was scarcely a week free from a hæmorrhagic discharge. I prescribed iron and ergot. A few days afterwards I was requested to visit her at her own home, and so great was the loss that I at first thought I had to do with a case of abortion. I then found the uterus very much retroverted, and prescribed ten grains of gallic acid every two hours. As soon as possible I admitted her into the hospital, and on the same day adjusted a Hodge's pessary. This gave immediate relief to the feeling of bearing down. I kept her in bed for about a fortnight, administering iron and ergot three times a day, with the result of procuring her an interval of nearly three weeks and a moderate period. I then dismissed her. She returned on Nov. 9th, stating that the menses were regular and not excessive in quantity, the flow lasting eight days "off and on." She complained of some discomfort in the left groin. Uterus found in good position, well supported by the pessary. The bowels were constipated, and she had frequent headaches. I prescribed quinine and iron and a mild aperient every night. On Dec. 7th I substituted for this a saline chalybeate aperient, with such effect that by Jan. 25th, 1876, she was again free from symptoms. The last period continued for seven days, fair quantity, and, after an interval of three weeks, on Feb. 11th, she again returned, complaining of aching in the pelvic region and bearing down, and stated that she had "gone over her time." I kept her under observation till May 2nd, when I was satisfied that she was pregnant, and on the 23rd I removed the instrument. She was confined on Sept. 25th. No return of the retroversion or menorrhagia.

CASE 4. *Frequent abortions, due to retroversion; menorrhagia; Hodge's pessary; subsequent pregnancy.* — Mrs. H——, aged twenty-four, married eighteen months, consulted me on Oct. 9th, 1872, on account of menorrhagia and frequent miscarriages, of which she had had three—the first at three months, the second at four months, and the third at two months. She complained of a feeling of weight in the sacrum and hypogastrium, increased by exertion. Menses very free, lasting eight days, much more abundant than before marriage. Patient, moreover, was anæmic in appearance; uterus retroverted; os open; uterine tissues generally flabby; slight leucorrhœa. A Hodge's pessary kept the uterus in excellent position; iron and ergot prescribed.—Nov. 9th: Uterus in good position, admitting sound readily in normal direction. I recommended her to continue the treatment, and to let me know should she miss a period.—Jan. 8th, 1873: Stated that she had last menstruated in the last week of November, and for the last few days had felt sick in the morning. For the last two or three days she had felt some bearing down on standing. I found the pessary lying across the vagina, but the uterus still in position. I withdrew the instrument, and while the patient was in the knee-shoulder position I reintroduced it.—It will suffice to say that on Jan. 26th she had a slight hæmorrhagic discharge; that on Feb. 10th I substituted (with immediate relief to pain in the sacral region on sitting or standing) a larger instrument, as the uterus was rather low in the pelvis; that from the 24th to the 27th she was again threatened with abortion; that I removed the instrument on May 22nd, and that the patient was confined on Sept. 3rd, under the care of Dr. Baxter Forman, of Stoke Newington. She made a good recovery, has had more children since, and is now, I believe, in good health.

CASE 5. *Retroversion, with attendant symptoms; pessary; pregnancy.* — Mrs. S——, aged twenty-seven; six children, the last on Sept. 20th, 1875. She came under my care on April 3rd, 1876, stating that since her last confinement she had suffered from severe bearing down and pain in the hypogastrium, for which she had been continuously under treatment, but without relief. Bowels costive and evacuations painful; sexual relations intolerable. I found the uterus retroverted, the fundus and body tender on pressure (with the view of elevation by the finger), and the os open, admitting the tip of the index finger; no excoriation and very little leucorrhœa. A Hodge's pessary gave immediate relief, and the patient walked home in comfort. I prescribed also a saline chalybeate aperient. On the 5th she returned to say that she was perfectly free from pain in walking, and had no bearing down. On July 1st I removed the pessary as an experiment, though the time was in my opinion too short; but the uterus remained in good position. She returned on the 8th, with the uterus again retroverted and a recurrence of the old symptoms. I reintroduced Hodge's pessary, with the same result as before. On Sept. 18th the sound entered readily in the normal direction, and there were no symptoms. Nov. 14th: Had missed her period by four days, and for several days had had morning sickness. On March 19th, 1876, I removed the pessary; and on July 20th I attended the patient in her confinement, from which she made an excellent recovery. No return of the retroversion.

CASE 6.—Mrs. S——, the subject of repeated miscarriages, was sent to me by a neighbouring practitioner, by whom she was supposed (from her symptoms) to be suffering from prolapsus. The case was one of retroversion, and was at once relieved by a Hodge's pessary. About a month afterwards, through violent exertion in lifting, the instrument was thrust out, and her old symptoms returned. I reintroduced the pessary. She became pregnant some months after. The instrument was worn till about the fifth month, and the patient was somewhat prematurely delivered of a double monster, which is now in the museum of the Obstetrical Society.

I could go on repeating cases *usque ad nauseam* to show the great value of this instrument in cases of retroversion. As I stated at the Manchester meeting, I regard it as a most efficient aid in the cases treated of by Dr. Braxton Hicks, and in many cases as the only treatment necessary. The preceding cases show in the clearest manner the direct relation between the displacement and the attendant symptoms. It is, moreover, with me a matter of repeated observation that in cases of subinvolution complicated with retroversion the restoration of the uterus is a *sine qud non* of successful treatment. Common sense teaches, and experience confirms it. Of course medical treatment goes hand in hand with the mechanical, but only according to circumstances. Each case must be a law to itself, and it is impossible to lay down such rules as will do away with the necessity for the exercise of

common sense. It is true that we rarely find cases of retroversion in which no symptoms are attributable to the displacement, but that can hardly be used as an argument against the use of mechanical treatment in cases in which the symptoms are directly traceable to the displacement. On the other hand, the man who, on finding a uterus retroverted, at once rushes to his stock of pessaries, and proceeds to adjust one as a matter of course, is not to be commended either for his judgment or skill.

(To be concluded.)

IMPERFORATE ANUS.

BY R. G. McCALMAN, M.D., C.M.

Experientia docet, and it is in the hope that my unlucky experience in this instance may be of use to others that I offer it for insertion in the columns of THE LANCET.

X——, a fine healthy boy, was born breech first in a semi-asphyxiated state, at 1 A.M., October 13th, 1877. Artificial respiration soon brought him round, and he roared lustily. Next morning, 14th, 9 A.M., thirty-three hours after birth, I was requested to see him, as his bowels had not been "opened." The first nurse had abdicated, and another, an aged one, reigned in her stead. She told me she had given the baby a dose of castor oil, but that he had vomited it soon after. I attempted to give the little fellow an enema, but after sundry pushings and careful inspection found there was no anus. On pressing the enema tube against the blind anus the child strained, and a general bulging of the perineum was observed, but scarcely any impulse from the bowel could be felt.

This being the first son and heir, and as the search for the rectum might prove difficult or fruitless, I obtained the assistance of Mr. S. Hempstead, of Newbury, late in the afternoon of the 14th. After consulting, we decided on limiting our operation to the perineum should we be baffled in our attempt to reach the rectum.

Making an incision through the skin, where the aperture should have been, I introduced the tip of my finger into the wound, but found no bowel. Mr. Hempstead then passed up a director in lieu of a probe, and felt it go through something, rotating it in the wound, and afterwards inserting his finger. I then cautiously passed up my little finger, and felt something like a membrane give way and encircle it. I pushed gently on, till nearly three-fourths of my finger had entered, and was so gratified that I asked Mr. Hempstead to verify the rectum, and the aperture we had made in it. He did so, but being anxious to spare the child unnecessary suffering, he did not carry his exploration as high as I did.

The baby did not lose much blood on this occasion, subsequently vomiting the meconium; and an inch of a tallow candle or dip was inserted into the opening on Mr. Hempstead's suggestion. Later in the night a good deal of secondary hæmorrhage occurred, requiring a plug steeped in solution of perchloride of iron to check it.

On the 15th I withdrew the plug, but no fæces were to be seen, felt, or smelt. The nurse told me he had slept most of the night, but had passed no water. Having syringed out the wound, and brought away some clots of blood, I gave him minute doses of calomel and opium, $\frac{1}{10}$ gr. of the latter to $\frac{1}{4}$ gr. of the former, twice a day, and applied a flannel wrung out of hot water over his belly. Soon after this, on being taken out of a warm bath, he passed his water, took about six teaspoonfuls of milk and water during the day, and slept all night.

On the 16th he took his mother's breast hungrily, and continued to do so for the next two days, thriving and sleeping well on it. On the 18th I ordered a dose of castor oil and introduced into the wound the tube of a stomach-pump for lack of a better instrument. I passed the tube up for 6½ inches, and felt it slip past two obstacles, the key to which will be seen afterwards. This upset him so much that he would not take any food. I therefore repeated the calomel and opium once, and the calomel afterwards to slight salivation, with the best effect. I ought to have mentioned that he seemed to like the castor oil very much, and that he did not vomit it. At the end of the first week the abdomen was greatly swollen and tympanitic, the cutaneous veins standing out in relief, or being easily traceable.

On the 22nd he passed about a teaspoonful of fæcal matter, perfectly fluid, and yellow, and repeated this on the 23rd. After this there was no further appearance of fæces. Thinking there might be some obstruction in the colon, I again used the tube, previously breaking down with my finger what I thought to be a fresh septum of the bowel. I felt the tube slip through something, and pass up for about ten inches. Whilst it remained *in situ*, I gave the child an enema of warm water by the stomach-pump, and syringed out the fundament with a weak solution of permanganate of potash, there being some fetid discharge from it. Great distension of the belly and jerking respiration followed this, and the child died collapsed on Friday, 26th, having taken a powder of calomel and opium four hours before death.

In the interval between the 23rd and 26th there was nothing new to note save that the child did not seem to drink or sleep so much.

Autopsy, fifteen hours after death.—Rigor mortis very slightly marked, emaciation moderate; cadaveric lividity of face, extremities, and abdomen; the finger- and toe-nails being as darkly and universally congested as if they had been placed in a vice during life. On opening the abdomen, a large quantity of fluid of an amber colour escaped, and the smell was most disagreeable. The small intestine was covered here and there with lymph, its coils sticking to each other. It was of a deeper colour than natural, something of the colour of red blotting-paper which has faded, and it seemed and felt empty. The transverse colon and stomach were adherent, and a thick layer of lymph, like a membrane, covered the splenic flexure of the colon, and tied it to the cardiac end of the stomach. The large intestine, excluding the sigmoid flexure of the colon, was of a deeper pink than natural, and seemed to contain no food. The descending colon, as it approached the sigmoid flexure, gradually narrowed, till the commencement of the sigma was no wider than the duodenum, being bent at an acute angle to the other half of the sigma, which was peculiar in this wise: it (the lower portion of the sigmoid flexure) expanded into an immense cloaca, if I may be allowed to stretch a point in the use of the term for description's sake. It was nearly as large as a cricket-ball, conical-shaped, and of a blacklead colour, firmly attached to the bladder and right ureter by adhesions, and to the pelvis by its natural connexions. Turning it over, a valvular rent was discovered on its posterior surface that would admit the finger, the rent only penetrating the muscular coat of the bowel. On passing up the tube of the stomach-pump through the supposed anus it was found to emerge through an aperture in the meso-colon, close to the rent already mentioned. What seemed to be a commencing ulcer or abrasion was also found on the back of this intestinal tumour in the vicinity of the other opening. Having tied the upper portion of the sigmoid flexure, I severed it from the descending colon, fæces escaping at the point of section. I then detached it along with the rectum, *en masse*, from the pelvis. It looked like a miniature bagpipes *minus* the pipes. The rectum terminated in a blind cone something like the coccyx in shape, and on its side was discovered an aperture or rent of a ragged nature, involving only the muscular coat, and communicating with the counter opening in the sigmoid flexure. I squeezed the mass tightly, but none of its fluid or gaseous contents escaped, proving that we had not perforated the imperforate bowel in our operation.

Remarks.—This was a dissection of the muscular coat of the bowel instead of a perforation of the entire septum. The slight escape of fæcal matter might have been due to a minute valvular aperture through the whole thickness of the parietes, or to exudation simply. The blackness of the sigmoid flexure and rectum I ascribe to the perchloride of iron, and not so much to inflammation, as the bowel was tough when cut into. The enlargement of this portion of the sigmoid flexure, I think, was owing to undue development and less to inflammation. The warm water injected into the general peritoneal cavity through the hole in the mesentery explains the abdominal inflammation. As to the cause of this hermetical sealing up of the bowel by Nature, to those who dive into the crystal streams of biology I may mention, as possibly some clue to this comparatively unusual phenomenon, that the mother of the child states she felt it quicken eight weeks from cessation of menstruation.

With respect to *cure* of such cases, I think an early operation with a stabbing as well as an incisive movement of the knife offers the best chance of success.

East Ilsley, Berks.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

CHARING-CROSS HOSPITAL.

POPLITEAL ANEURISM; LIGATURE OF THE FEMORAL ARTERY.

(Under the care of Mr. BARWELL.)

THE following notes should be read in connexion with those of Mr. Croft's case published last week.

Owen M——, aged forty-nine, a porter, was admitted on Nov. 9th, 1877, with popliteal aneurism of the right leg. He had been a soldier for twenty years, had served through the Crimea and the Indian Mutiny, had been a hard drinker, and had a history of syphilis and rheumatism; he had also suffered from hæmoptysis, and had a history of chronic phthisis for the last fourteen years.

On admission, the patient was an unhealthy-looking man, had a syphilitic eruption on his face, and looked worn out. He had a cough, and slight hæmoptysis and albuminuria. There was visible pulsation of all the large arteries, which were very tortuous and rigid. There were marked dilatations of both axillary arteries. In the right popliteal space there was a large fusiform tumour, extending along the course of the popliteal artery. It was about three inches long, and two inches wide at its greatest diameter, and had a strong expansile pulsation. On compressing the femoral artery, the pulsation was arrested, and the tumour disappeared. The patient stated that he first noticed a pulsating swelling in the right ham about thirteen months before; at first this caused him no annoyance, but later he suffered from numbness and loss of power of the right leg, and just previous to admission he was unable to put his right foot to the ground.

On Nov. 14th Esmarch's elastic bandage was applied to the right lower limb, from the toes up the thigh, and kept on for seventy minutes. The tumour returned immediately after the withdrawal of the bandage, and was unaltered in character. On Nov. 17th compression was again tried. Esmarch's bandage was applied for five hours; immediately after the withdrawal of the bandage the tumour appeared solid, but the pulsation soon returned, and was as bad as ever.

On November 22nd, the symptoms being urgent, Mr. Barwell, after consultation with his colleagues, determined to ligature the femoral artery. The patient being placed under the influence of ether, the artery was readily exposed at the apex of Scarpa's triangle, and a carefully selected piece of moderate-sized carbolised catgut was placed around it, but purposely not sufficiently tightly to rupture the inner coats of the vessel. An india-rubber drainage-tube was placed in the wound, and the edges were brought together with sutures. All Lister's antiseptic precautions were strictly observed during the operation and at the subsequent dressings.

In the evening the patient was going on well; had no pain; temperature 98·4°; pulse 96. The temperature of both limbs was the same. He passed a good night, and on the morning of the 23rd the temperature was 98°; pulse 90. He had no pain, but complained of slight numbness of the right leg; the tumour felt hard and solid. On the 24th the temperature was normal. The wound was dressed and found to be healed, except around the drainage-tube. The drainage-tube was removed; there was a very slight serous discharge in the dressing. On the 28th the dressings were taken off; the wound was quite healed; the sutures were removed. The tumour was contracting; there was no pulsation to be felt below the seat of deligation. There was slight numbness of the foot, but the foot was warm. On the 30th the patient's general condition was better than it was before the operation; he had gained flesh, and was more cheerful. On December 1st he got up and walked about the ward; he complained of slight stiffness of the right leg. On the 5th he was able to walk easily, and had no loss of sensation or wasting of right leg.

Dec. 19th.—Patient left the hospital to-day, having waited in the hospital for nine days for a letter for the Convalescent Home. The right popliteal artery was contracted to a hard cord; there was no pulsation, and the patient's general health was greatly improved.

Remarks by Mr. BARWELL.—This case is an example of how, with the antiseptic treatment, we can perform major operations, even in subjects debilitated to the utmost, with very little risk to the patient.

EVELINA HOSPITAL FOR CHILDREN.

PURPURA WITH SUBRETINAL HÆMORRHAGE.

(Under the care of Dr. GOODHART.)

WE are indebted to Mr. W. E. Paley, resident medical officer, for the following notes.

Mary W——, aged four, was admitted on July 31st, 1877. For the previous three days the child had been fretful and languid, and had complained of soreness of the mouth; the skin was also noticed to be rough; and on July 29th the tongue was seen to be covered with ulcers, and the body became covered with purple spots. Between two and three o'clock on the morning of admission bleeding from the gums came on, and had continued freely ever since; blood also flowed from the right ear, from which, since an attack of scarlatina two years ago, thick pus had occasionally been discharged. The child had enjoyed very good health. She was naturally of a dark sallow complexion; and it had been noticed that since her birth any scratch or cut would bleed inordinately. Four months before admission she passed blood with her motions twice in one day; but this did not recur, and the bowels have since acted regularly. She was said to be fond of vegetables, and had plenty of them; and had been well fed, though her appetite had been bad for the last four days. The family history was good. Two other children were healthy. The mother has a dark complexion, and said she believed she had a similar attack when a child.

On admission, the patient was well nourished, but very pallid; she was said to be more than usually pale. The gums were much swollen, greyish-looking, and fungating. They looked, however, worse than they really were, for the bleeding from them had been free, and they were covered by blood-clot. There were traces of blood having come from the right ear, but none was then exuding. The skin of the whole body was as dark as that of a half-caste, the hair brown, the eyes dark brown, sclerotics paler than usual, no subconjunctival ecchymoses. The face, upper parts of the back and chest, and the arms and legs, were covered with small petechiæ. The lower part of the back and the abdomen showed only a few spots. There were no bruises, nor did the child seem to be in any pain. It lay feeble and exhausted. Temperature 99·8°; pulse 134; respiration 20. The lungs, heart, and abdomen were normal. Urine normal. Gallic acid was administered internally, six grains three times a day. Green vegetables, milk, and beef-tea were ordered. The hæmorrhage from the gums becoming serious, they were painted with tincture of the perchloride of iron.

She vomited blood twice on July 31st, and once during the night, but she slept well. On August 1st the bleeding from the gums had nearly ceased. Temperature 98·2°; pulse 138. Bowels open once; motions dark-coloured; no blood. On August 2nd the bleeding from the gums still continued slightly. Ten grain doses of chlorate of potash were now ordered to be taken every four hours, and a tablespoonful of lemon-juice was given four or five times in the day. On the 4th there was still a little bleeding from the gums. The purpuric spots on the skin were fading. On the 5th the eyes were examined with the following result:—Right: deeply pigmented choroid; disc whitish; blood-supply to retina good. Above and internal to the optic disc, and at some little distance from its margin, there was a large dark round blotch, with a haze over it, and a white margin surrounding it. Near it was a considerable vessel. The appearances were those of hæmorrhage into the choroid, with either atrophy round it, or the white margin of a displaced retina. There was no hæmorrhage to be seen on the left side. The choroid and optic discs were as on the other side. In both eyes there

was an uneven distribution of pigment, some part of the choroid looking quite white by contrast.

The blood was examined microscopically. The corpuscles were deficient, the blood looking watery. Granular matter in slight excess; the corpuscles rather variable in size. There were some sixty white ones in the field, the majority of them being not much larger than the red ones.

On the 7th the child was much better. The fauces were less spongy, and there was no bleeding. The spots were fading, but not yet gone. On the 9th she was still improving. The purpura was almost gone. The chlorate of potash and lemon-juice were now discontinued, and perchloride of iron taken instead. She continued to improve daily, and left the hospital quite well on August 23rd.

The child has just lately been seen again. She has remained quite well. The pupils were dilated with atropine, and the fundus carefully examined. There is now no trace of the former hæmorrhage, and the uneven distribution of pigment above-described was hardly noticeable.

HOSPITAL FOR DISEASES OF WOMEN AND CHILDREN, CORK.

SURGICAL CASES.

(Under the care of Dr. H. MACNAUGHTON JONES.)

Fibroid polypus of uterus.—E. M——, aged forty-eight, ten times pregnant, for two years suffered from constant menorrhagia, and was admitted with severe hæmorrhage. On examination the os uteri was found dilated and occupied by a large polypus. The finger was easily introduced, and the pedicle was found to be attached to the cervix. Under ether the polypus was completely removed with a Heywood Smith's écraseur on April 20th. There was no bleeding of importance, and the subsequent treatment consisted of disinfectant lotions, with opiates. The polypus was about the size of the closed hand, and characteristically fibroid. The écraseur acted admirably. She was dismissed on May 10th, cured.

Contracted knee-joint, with abscess, treated by subcutaneous division of hamstrings and antiseptic opening of abscess.—E. K——, aged eighteen months, was admitted on April 27th, 1877, with the knee-joint contracted and bent almost to a right angle. There was a large abscess over the joint, which was obscured by the swelling and fluid. The abscess was opened antiseptically, all the fluid drawn off, and the cavity washed out with carbolic solution (1 to 20); then, under

Anterior view of joint on admission.

Joint on Nov. 1st, 1877.

spray, all the hamstrings were subcutaneously divided and the joint forcibly straightened. The limb was put up antiseptically, and flexible steel splints were used to support and extend the joint. The child recovered with a good joint, fairly movable, and without shortening of the limb.

Old cicatricial web extending from shoulder to wrist, from burn, treated by free dissection and division, transplantation and skin-grafting.—D. D——, aged eleven years, was admitted on July 15th, with the left arm useless from a large web of integument extending from below the axilla to

the wrist. The fold was thick and broad, but no vessels or nerves could be detected in it. As the mother was anxious for some operative interference, though she had previously refused, an operation was decided on. Accordingly, Dr. Jones dissected up the entire cicatrix, completely freeing any adhesions, and laying bare the entire arm. The thick bands about the joint were cleared separately, and the parts in the antecubital space carefully divided. The brachial artery was quite superficial, but not involved in the web; the biceps tendon was very tense. The arm, having been extended as far as possible, was put up with carbolic dressing, and bandaged to a straight splint. The bleeding was profuse at first, but presently ceased. In forty-eight hours the arm was secured to the side, and a quadrilateral portion of integument transplanted from over the ribs to cover the centre of the raw surface at the elbow-joint. Posteriorly, another large piece was brought forward and covered the surface above for about four inches. These pieces were united with silver sutures. Both operation and dressings were done under spray. The piece taken from the side did not live; that from the posterior part of the arm, which was brought forward, united perfectly, and covered the exposed surface above. The arm was kept well extended by a flexible steel splint, and was dressed antiseptically for some time. Six small pieces of

skin were put on to different parts of the granulating surface, and the arm was finally put up with an elbow-splint. The raw surface rapidly healed over; the side soon got well, and the arm now presents the appearance represented in the drawing.

ROYAL INFIRMARY, EDINBURGH.

A CASE OF EXCISION OF THE MAMMA, IN WHICH A NEW METHOD OF DRAINAGE WAS EMPLOYED.

(Under the care of Mr. BELL.)

FOR the following notes we are indebted to Mr. C. E. Douglas, house-surgeon.

Mrs. T——, aged sixty, was admitted on Dec. 24th, 1877, suffering from scirrhus of the mamma with epithelioma of the nipple. On the 26th inst. Mr. Bell removed the breast under antiseptic precautions, but tried a new plan of drainage, on a principle suggested by Mr. Mc Gill, of Leeds, in the January number of the *Edinburgh Medical Journal*. A piece of drainage-tubing about three feet long was used. One end was pierced with holes, laid along the wound, and secured at the upper end by a stitch. The other end was weighted and placed in a six-ounce bottle half full of carbolic lotion (1 to 40). To prevent air from passing in by the side of the tube, it was carefully packed round with pieces of loose gauze. During the next twenty-four hours about five ounces of serum were drained away, and when the dressing was removed only about a fourth of the usual discharge was found on it. The only extra precaution required during dressing was that the tube should be secured by a piece of bandage or a clip, lest any air should pass up it while it was out of the bottle. On the second day after the operation scarcely any discharge was found on the dressing. After this the wound was dressed only every second day, until January 4th, when it was found to be almost healed, and was dressed with a strip of boracic lint. The patient was dismissed on Jan. 7th, the twelfth day after operation, the wound being quite healed. The temperature and pulse averaged normal.

The advantages claimed for this mode of drainage are: (1) that it prevents tension; (2) that it lessens the amount of discharge on the dressing, thus allowing of fewer dressings; (3) that under favourable circumstances it would do away with dressing the wound, as the bottle need only be emptied and refilled; (4) that it would be a speedy indication of bleeding. The disadvantages are: (1) the difficulty of arranging the dressings so that no air could pass up by the tube; (2) the risk of the tube becoming choked by clots.

Medical Societies.

ROYAL MEDICAL & CHIRURGICAL SOCIETY.

Rodent Ulcer.—Numeration of Blood Corpuscles in Skin Diseases.—Simple Atrophic Sclerema.

THE ordinary meeting of this Society was held on the 22nd inst., Dr. C. West, President, in the chair. Three papers were read, one by Mr. Higgens on a case of rodent "ulcer" (or "cancer," as it is preferably called by many), the patient being shown to the Society; one by Dr. Thin involving the results of his research into the proportion of red corpuscles in the blood of certain cutaneous diseases; and, lastly, one by Dr. Harley in continuation of his previous paper on sclerema.

The following is an abstract of the paper on a case of Rodent Ulcer, by Mr. C. HIGGENS. The patient was a married woman, aged forty-five. Her health had always been good. The disease commenced thirteen years before admission to Guy's Hospital, at the remarkably early age of thirty-two, as a pimple on the left side of the nose, which, however, showed but little tendency to ulcerate until five years after its first appearance. During the progress of ulceration a second pimple, of apparently the same nature as the first, made its appearance in the angle between the right side of the nose and cheek; it did not, however, ulcerate. The eyeball, which was quite healthy, was excised, and the ulcerated surface destroyed with a paste of chloride of zinc and starch applied on strips of lint; after separation of sloughs some cicatrisation took place. The disease soon commenced again, and eighteen months later the surface of the ulcer and adjoining infiltrated tissue were destroyed with the galvanic cautery and chloride of zinc paste; the second pimple, which was enlarging, was also burnt out. After separation of sloughs cicatrisation again took place to a great extent, but four months later the disease was again spreading rather rapidly. The whole of the thickened margin and base of the ulcer, together with a large amount of adjoining healthy structures, including skin, mucous membrane, muscles, and bone, were cut away with a scalpel, the bleeding stopped with a "thermo-cautery," and chloride of zinc paste applied all over the cavity left. The wound finally healed entirely, but, subsequently, some recurrence of the ulceration took place, and the diseased tissues were again removed with knife, cautery, and caustic. Cicatrisation once more took place, and, with the exception of a small part of its outer margin, the wound has since remained firmly healed.—Mr. GASKOIN brought forward a male patient, fifty-seven years of age, who, he believed, showed an instance of rodent ulcer in a rare situation. There was a large oval ulcer, four inches by three, seated on the left side of the vertex. The margins of the ulcer were hard, its base uneven, and there was a copious discharge, with some bleeding, from the surface. There had been no attempt at healing.—Mr. HULKE had placed on the table some of the late Mr. Moore's preparations of this disease from the museum of the Middlesex Hospital. Mr. Moore was the first who attacked some of these advanced cases of rodent cancer. Mr. Hulke also showed photographs of some of his own cases, and one of Mr. George Lawson's. In all the method adopted was free excision with the knife, then the actual cautery close to the bone (and it was surprising to how slight a depth the hot iron penetrates the bone), and then the free application of chloride of zinc paste. Mr. Hulke had discarded the galvano-cautery, owing to the flexibility of the platinum-knife, when thin enough to be sufficiently heated, and the difficulty of ascertaining the amount of induration in the tissues when charred. Unless those cases were dealt with sweepingly at first the disease may be excited to increased activity. The ulcer in Mr. Gaskoin's case had not the characters of rodent cancer, and its situation—the hairy scalp—was extremely rare. Mr. Hulke had never seen rodent cancer arise in this region.—Mr. GASKOIN was himself not quite sure the case was one of rodent cancer, but Collis states that occasionally this disease may arise on the scalp. Mr. Gaskoin also remarked that lupus was not limited to early life; he had seen cases of undoubted tubercular lupus beyond middle age, and he presumed rodent cancer might occasionally occur earlier than is generally stated. He referred to the indefinite character of the early stage of rodent cancer.—Mr. NETTLESHIP, with reference to a remark in the paper that rodent ulcer begins as a flattened nodule beneath the skin, was under the impression that it almost always began as a papule. He recalled one case which he had seen, in which the growth did appear to start subcutaneously. That had the microscopical characters described by Mr. Higgens—viz., tubes lined with cylindrical epithelium.—Mr. MORRANT BAKER believed the patient shown by Mr. Gaskoin had been under his own care some years ago. If so, he was certain the case was then one of rodent ulcer on the vertex; and (Mr. Baker subsequently added) he had removed it accordingly. If it were not rodent ulcer, what was it?—Mr. BARWELL agreed with Mr. Hulke that "cancer" was a better term than "ulcer" to be applied to this disease. The distinction between such cases and simple lupus, which could be cured by superficial scarifications, seemed great. Mr. Barwell added that he now used Paquelin's thermo-cautery in place of the galvanic cautery, and by its means had recently eradicated a rodent cancer of the face, the operation being followed by some exfoliation of the malar bone.—Mr. HULKE could not say what Mr. Gaskoin's case was, except that it did not bear the characters of rodent cancer. It might have been modified by treatment. Rodent cancer is epidermal from its very origin, and never begins *beneath* the skin.—Mr. GASKOIN said he was only employing expectant treatment.—Mr. HIGGENS, in reply, agreed with Mr. Hulke as to the free employment of caustics in this disease, but only after free excision. The patient had been to another hospital, where, after consultation, it had been decided not to interfere with the growth. He thought Mr. Moore had said that rodent cancer begins frequently as a flattened induration in and beneath the skin.

A paper was then read, On the Proportion of Red Corpuscles in the Blood in some Skin Diseases, by GEORGE

THIN, M.D. The investigations recorded in this paper were made by the methods introduced by M. Malassez, of Paris, which consists of diluting the blood to a known degree by artificial serum, and in counting the number of corpuscles contained in a given quantity of the diluted blood. The latter part of the operation is done by counting the corpuscles seen in a measured length of a capillary tube of known capacity. Absolute accuracy is not obtainable by this method, but comparative results show that the range of error is not so wide as to invalidate for general purposes the data which it affords. M. Malassez has found that in Paris the number of red corpuscles in a millimetre cube of blood varies in healthy men between four and five millions; in females the number is less. The number varies in the same person within certain limits, being affected by place of residence, exercise, and quantity of fluids drunk. The same observer found that the number diminishes greatly in wasting diseases. In cancer he counted in a man as low a number as two millions and a half, and in a woman one million and a half. In phthisis his lowest numbers were, in a male two millions and a half, and in a female slightly under one million. In selecting persons suffering from skin disease for examination, only those were chosen in whom there was no reason to believe that the condition of the blood was affected by medicinal treatment, or the existence of other maladies. The selection was made from cases kindly given by Mr. Morrant Baker, Dr. Tilbury Fox, and Dr. Payne, and from patients under the author's care, and in every instance the symptoms pointed to a genuine idiopathic outbreak of disease. In order to provide data for comparison, the number found in healthy persons, and in some cases of severe organic disease is first given; the latter being placed at the author's disposal through the courtesy of Dr. Cayley, physician to the Middlesex Hospital.

Healthy Males.

There was found in a		
Butcher, aged 22	4,760,000	per mm. cube.
Greengrocer, aged 28	4,700,000	,,
Baker, aged 22	4,600,000	,,
Medical practitioner, aged 26 ...	4,400,000	,,

Healthy Females.

Domestic servant, aged 29 ...	3,880,000	,,
,, ,, aged 31 ...	4,690,000	,,
,, ,, aged 24 ...	4,260,000	,,
,, ,, aged 19 ...	4,020,000	,,
Girl, aged 13	3,940,000	,,
Married woman, aged 25	4,210,000	,,

Diseased Persons.

In a man, aged 58, suffering from stricture of the œsophagus, and unable to swallow solid food..	3,500,000	,,
A young woman with extremely anæmic appearance	3,110,000	,,
A man, aged 29, in a very advanced stage of phthisis ...	2,160,000	,,

The following numbers were found in cases of skin disease:

Psoriasis: man, aged 25	5,250,000	per mm. cube.
,, ,, aged 25	4,820,000	,,
,, woman, aged 27 ...	4,330,000	,,
,, ,, aged 18 ...	4,448,000	,,
Eczema: man, aged 60	3,750,000	,,
,, ,, aged 19	4,200,000	,,
,, girl, aged 12	4,420,000	,,
,, woman, aged 26 ...	4,350,000	,,
,, ,, aged 20 ...	3,880,000	,,
,, ,, aged 25 ...	5,050,000	,,
Pemphigus (chronic): man, aged 30—40	3,580,000	,,
Acne sebacea: girl, aged 16 ...	4,050,000	,,
Prurigo (Hebra): boy, aged 13..	3,420,000	,,
(Counted in same case after an interval of a month)	3,550,000	,,
Acne rosacea (second stage): man, aged 47	4,140,000	,,

The following numbers were found, in the case of a boy aged seventeen, a patient of Dr. Tilbury Fox, suffering from anæsthetic leprosy. He was born in Bombay of European parents. The disease was not in an advanced stage.

On March 1st, 1877	4,320,000	per mm. cube.	
On March 26th, 1877	4,470,000	,,	,,
On May 26th, 1877	4,830,000	,,	,,

It is seen from these figures that an outbreak of psoriasis is compatible with a high proportion of blood-corpuscles. In eczema the number is about normal. The case of the man aged sixty was a severe one and had lasted many months, and the hygienic conditions were bad. In the man aged nineteen the disease had invaded in a scaly infiltrated form nearly the whole surface of the body, and had lasted for a number of years, the case being one of great severity. That in such a case the number should have exceeded four millions—the enumeration having been repeated several times with great care,—shows that a diminution in the number of red corpuscles is not a necessary condition of eczema. During the time that the leper was under the author's observation he was taking, by Dr. Fox's prescription, iron and mineral acids. There was no improvement in the disease during that period. On one occasion the proportion of white corpuscles to red was estimated, and was found as high as one white to fifty red. The only cases in which the number of red corpuscles was deficient were the case of prurigo and that of chronic pemphigus. In the case of prurigo the effect of broken sleep on the general health since the first year of life is to be taken into account.—Mr. GASKOIN pointed out that the old treatment of psoriasis by venesection was rather borne out by these observations, which showed an increase in the blood-corpuscles in this affection.—Mr. M. BAKER remarked on the extreme care displayed in the investigations. He understood Dr. Thin to say that these observations disproved the dependence of certain skin diseases upon morbid blood-condition. But there were no doubt other conditions besides the proportion of corpuscles to be taken into account.—Dr. THIN only meant to convey that it was too much the fashion to assume a profound blood-condition in diseases of the skin without any grounds for the assumption, and his observation only showed that in one respect at least the blood was not modified. He referred to M. Malassez' method of ascertaining the amount of hæmoglobin in each corpuscle. He would call particular attention to the case of prurigo of Hebra, which he had related in his paper. It was of rare occurrence in this country, and its existence had even been denied by Mr. Hutchinson.

A second communication on Simple Atrophic Scleroma was then made by Dr. JOHN HARLEY. In this the author describes the condition of a patient, a well-developed woman (Louisa M——), twenty years of age, in whom the hands are affected with sclerema, causing such impediment to the circulation that the members are cold and frequently dusky. The movements of the wrists, and, to a slight extent, those of the elbows and hips, are diminished, and stiff and painful. The adipose tissue has completely disappeared from the neck and upper part of the chest, which, from the level of the hyoid bone to the lower edge of the first rib, is marked by lineæ atrophicæ, alternating with lines of healthy skin, but in which there is an increase of pigment. The development of the lineæ atrophicæ may here be studied by the aid of a pocket lens. The affected area is pervaded by a coarse network of hair-like vessels, which form a scanty network with oblong meshes. The larger vessels lie in, or by, the borders of the lines of healthy skin; the finer branches lose themselves by sudden attenuation in the lineæ atrophicæ, which already possess a pearly whiteness. Such a network of bloodvessels is not seen in the healthy skin, and its presence in the morbid areas is due, the author maintained, to regular interruptions of the circulation, by the shrinking of the lacuno-canalicular system, and bloodvessels of the affected lines or areolæ, resulting in the formation of non-vascular tendinous tissue, in place of soft vascular skin. In the second stage of the process these vessels disappear. The temporary congestion of these vessels on their way to extinction leads to no other change beyond perhaps the deposition of pigment (as may result from the application of a sinapism in some persons); and the part is neither the seat of irritation nor of hypertrophy, but the reverse, there being a diminution of temperature and of tactile sensibility throughout the process. Already there are indications of functional disturbance of the alimentary canal. Standing alone, this case would appear to have no definite signification, but side by side with that of a patient whose history has been recorded by the author in the last volume of the Transactions (vol. lx.), it becomes extremely interesting, since there is an exact resemblance in the two cases in every particular, and they differ only in sex, age, and in the duration of the disease. In the case brought forward now, the disease is in its earliest stage; in the previous one it has

existed for six years, and has nearly brought the patient to the term of his existence. [Both of the patients were in attendance.]

PATHOLOGICAL SOCIETY OF LONDON.

Dermoid Cysts.—Paralysis Agitans.—Colloid Cancer.—Diaphragmatic Hernia.—Phosphatic Diabetes.—Cerebral Aneurisms.

THE ordinary meeting of this Society was held on the 15th inst., when there was but a small attendance of members. Dr. Murchison occupied the chair. Several interesting communications were made, especially one by Dr. Dowse, on the pathological changes in paralysis agitans, and an account of the analysis of the urine in two cases of phosphatic diabetes by Dr. Ralfe. Mr. Wagstaffe raised the question of the possible connexion of dermoid cysts with the imperfect closure of the branchial fissures, and Dr. Greenfield illustrated the connexion of aneurisms with emboli and cerebral hæmorrhage.

Mr. WAGSTAFFE showed three specimens of Dermoid Cysts growing along the lines of Branchial Fissures. One was removed from the inner angle of the orbit, and two others from the outer angle of the orbit, all being situated under the orbicularis palpebrarum muscle and adherent to the bone, in the first case along the junction of lachrymal and frontal bones, in the two latter at the fronto-malar suture. Verneuil has advanced the theory that dermoid cysts of the face and neck always occur along the line of branchial and other embryonic fissures, and are connected with them, and Mr. Wagstaffe brought forward these cases especially to elicit opinion on this point. He mentioned three cases where this was certainly not the case—one described by Mr. Arnott, situated over the suture between the two halves of the frontal bone, another found in the torcular Herophili. Of twenty-five cases of dermoid cysts in peculiar positions, Mr. Wagstaffe found that twenty occurred along the line of the first branchial fissure. These cysts are distinguished by their depth and their attachment to bone.—Mr. HULKE said that these cysts were easily distinguished from similar growths by their depth and attachments; the bone beneath them was usually dimpled, and occasionally perforated. From these cysts occurring so frequently in situations other than the branchial fissures—as the ovary and the mediastinum—he felt it difficult to accept M. Verneuil's theory. Sublingual cysts are sebaceous, rather than dermoid; they never contain hair.—Mr. DORAN said that the cysts so common at the outer angle of the orbit lay out of the line of the clefts dividing the visceral arches, and in front of the frontal and malar bones, which are formed in membrane late, when the fissures are being obliterated. On the other hand, an adhesion of the epiblast and mesoblast, such as occurs in the formation of the oral cavity of the amphyoxus, may produce a complicated tissue, from which these cysts spring.—Mr. BRYANT had seen a large number of these cases. Except at the outer angle of the orbit, there is no special site at which they occur; and he could not accept Verneuil's theory without additional evidence.

Dr. DOWSE exhibited microscopical specimens and drawings of the changes in the nervous system in a case of Paralysis Agitans. The patient was an inmate of the Central Sick Asylum who exhibited well-marked signs of the disease. The tremor began in the head, then spread to the arms and thence to the legs, rhythmical, unaffected by volition and emotion, as is the case in other tremors. She could stand, but, on attempting to walk, stumbled backwards and fell flat on her back. Body rigid, inclined forwards, neck stiff, face expressionless, eyes turned out. She complained of intense heat, but the temperature was rarely above the normal; sensation normal. Gradually she lost power in all her limbs, and lay helpless in bed, requiring her position to be constantly altered; later on, the intellect, which had been clear, failed, and she died. The brain weighed fifty-three ounces; the grey matter appeared normal; arteries at the base were atheromatous; the nerves were notably firm, and the medullary matter was glistening and firm. Spinal cord weighed ten drachms; it was very firm. Mr. Kesteven made a microscopical examination of the nerve-centres, and found trophic granular pigmented "tuscona" degeneration of the nerve-cells at the decussation of the anterior pyramids, the olivary body, nucleus of ninth nerve, laminæ and corpus dentatum of cerebellum, and in the anterior cornua of the spinal cord. He also observed cortical sclerosis of the right lateral column of the cord, with miliary and colloid degeneration, and miliary changes in the white matter of the corpus striatum and hemispheres. At one spot in the nucleus of the fifth nerve there was a collection of colloid bodies in a cavity. The minute vessels were thickened, with well-marked perivascular spaces. Dr. Dowse asked whether the symptoms noticed during life were to be looked upon as the direct result of these changes in the nerve centres.—Dr. MURCHISON alluded to a case which he had published, where, however, the patient died of typhoid fever, which impaired to some extent its value as illustrating the pathology of paralysis agitans. Dr. Cayley carefully examined the organs and found changes closely resembling those described by Dr. Dowse; there was marked sclerosis of the posterior part of the spinal cord in the cervical and dorsal regions, and aggregations of leucocytes in spots, and changes in the central canal of the cord. Other cases examined abroad illustrated the same changes.

Mr. LYELL showed a fresh specimen of Colloid Cancer of the Rectum and Buttock, removed from a patient lately under Mr. Hulke's care in the Middlesex Hospital. The patient was admitted in July, 1876. Five years previously she had noticed a swelling at the side of the anus, which slowly increased in size, and was attended with discharge from the anus after twelve months. A year before admission to hospital she had a fall, after which the growth, discharge, and pain increased rapidly, and led to serious disturbance of the general health. Colotomy was performed, and was attended with great relief; the patient lived for eighteen months, and died from exhaustion from the progress of the disease. The lower two inches of the rectum was infiltrated with colloid cancer throughout, almost obliterating the channel; a large mass of the tumour extended up behind, and in the outer wall of, the rectum; the growth also filled the ischio-rectal fossæ, and spread on to the buttocks, where there were large irregular ulcers filled with a soft tremulous mass, the edges of the skin at places being infiltrated, but at other parts thin, and not adherent to the subjacent cancerous material. In a somewhat similar case recorded in the Transactions of the Society, the growth had spread in the same manner from the rectum to the buttock. Mr. Lyell thought this case illustrated the great relief to be obtained by colotomy in cases of cancer of the rectum attended with great pain.—In answer to Mr. Butlin Mr. Lyell stated that two of the glands in the inguinal region were enlarged and infiltrated with colloid cancer; there were no other secondary deposits.—Mr. BRYANT was reminded by this case of one in his own practice—a lady who had been suffering from stricture of the rectum for two or three years before she came under his care. He found, in addition to the growth in the rectum, a mass above the brim of the pelvis on the left side, and he therefore performed colotomy, which was rendered necessary by the pain and obstruction on the right side. The patient lived between fifteen and eighteen months, quite free from pain. The mass felt in the pelvis grew very rapidly, infiltrated the tissues of the left loin, and in nine months burst through the skin, and eventually filled up the entire interval between the pelvis and ribs. At first a small quantity of motion passed through its ulcerated surface. He considered the advantage of the operation in this and similar cases was enormous.—Dr. WILTSHIRE asked if it was not remarkable that the inguinal, and not the lumbar glands, were affected?—Dr. MAHOMED had lately seen a case, in St. Mary's Hospital, of stricture of the œsophagus, in which the patient had noticed a tumour of the spermatic cord for nineteen years. On examination, this proved to be a colloid cancer, which spread up and affected the peritoneum, and involved also the opposite spermatic cord.—Mr. HULKE had noticed that colloid was of slower growth than other forms of cancer of the rectum, and that it often runs on a long time before causing inconvenience; he had recently seen a man who had noticed the growth for three or four years before he sought advice at the hospital, and who had had trouble in connexion with his rectum for four or five years before he noticed any tumour. The unequal affection of the skin may serve to diagnose colloid from other cancers, the skin appearing to ulcerate from distension rather than infiltration.

Dr. GARLICK exhibited a specimen of true Diaphragmatic Hernia. The mother of the patient had a fall during her pregnancy. The child was always weakly. At three months it had a fall, at six months a bad cough which lasted some time, at eighteen months an attack of severe vomiting, with obstinate constipation, and the mother noticed that the belly was sunk in; after this the child often complained of feeling sick. Twelve months after this it was again seized with severe vomiting, and was admitted into the Hospital for Sick Children, under Dr. Cheadle. There was great thirst, (but anything taken was instantly vomited), retraction of abdominal walls, and constipation. The child became collapsed and died. At the post-mortem examination there was noticed marked pigeon-breast, with greater prominence of right than left side; and a tumour, consisting of the thinned-out fibres of the right lobe of the diaphragm, covered by the pleura and lined by the peritoneum, containing the pyloric end of the stomach, was found projecting up and filling a hollow in the base of the right lung. The mouth of the sac was close to the œsophagus, and admitted three fingers and the thumb. There were no adhesions in the sac. The right lung was smaller than the left; the heart was not displaced from its normal position. What was the history of this hernia? Was it congenital? It evidently was present twelve months be ore, when the child had the attack of vomiting, and the change in the right lung pointed to its being a chronic condition. Stress has been laid upon diaphragmatic hernia being produced by negative pressure upon the viscera during inspiration. In this case the marked pigeon-breast showed that this negative pressure had been powerful.

Dr. RALFE read the notes and showed the urine of a case of Phosphatic Diabetes. The man, aged twenty, was admitted into the Seamen's Hospital, suffering from great general debility, pain in all his limbs and across his loins, temperature normal, pulse weak, a few coarse râles in the chest. Urine clear, acid, no albumen or sugar. The lad was strumous, with a curvature of the dorsal spine, but he stated that he had enjoyed good health until three weeks previously; since then he had lost 18 lb. in weight. He suffered from boils. No dimness of sight. After a week the mucous râles cleared off, and the general condition improved, but there was still great prostration without obvious cause. The urine was then collected during twenty-four hours, and was found to amount to 4600 cc., of a sp. gr. of 1010, the normal quantity being 1500 cc., of sp. gr. 1020. The following twenty-four hours it amounted to 1400 cc., of sp. gr. 1029, the relation of the solids excreted on the two days remaining about constant, and exceeding the normal by about one-third. The urine was subsequently collected during each day of the patient's stay in hospital. The average quantity passed per diem during a month was 3263 cc., of sp. gr. 1017. On four occasions Dr. Murphy estimated the amount of urea and phosphoric acid, and obtained of the former 67, 116, 103, and 61 grammes; of the latter 5·3, 9·1, 7 and 4·28 grammes. Dr. Ralfe made a quantitative estimation of the urea and the earthy and alkaline phosphates with standard solutions distinct from those used previously, with the following results:—Quantity of urine, 2700 cc.; total solids, 108 grammes; urea, 89 grammes; phosphoric acid, in combination with lime and magnesia, 1·8 grammes; phosphoric acid, in combination with the alkaline oxides, 3·7 grammes; total phosphoric acid, 5·5 grammes. The patient's general condition improved, and he gained 15 lb. weight while in the hospital, but the urine remained unaltered. Drs. Prout and Roberts first described a condition of diuresis with increased elimination of urea, but Dr. Dickinson was the first to notice the excess of phosphates in these cases, and to suggest its pathological significance. Dr. Tessier, of Lyons, has more recently attempted to prove that "diabète phosphatique" is a distinct affection from azoturia of Prout, stating that the excess of urea is not constant, in some cases the amount of urea being even below the normal. But if the excess of phosphoric acid is caused by the disintegration of nerve-tissue, as held by both Dickinson and Tessier, the urea ought also to be constantly increased, as nervous matter is rich in both phosphoric acid and albuminous substances. Until this point is settled the term polyuria had better be used for these cases. Dr. Tessier has divided his cases into three groups—1, with predominant nervous symptoms; 2, preceding or accompanying pulmonary affections; 3, ending in or alternating with saccharine diabetes. Dr. Ralfe also gave an analysis of the urine of a second case under his care:—Quantity of urine 2900 cc., sp. gr. 1010; earthy phosphoric acid 2·3 grammes, alkaline phosphoric acid 2·9 grammes, urea 52 grammes.—Dr. MURCHISON remarked that these cases had escaped his observation in practice; he should like to know what was their usual termination.—Dr. RALFE had not seen the end of a case. Tessier mentioned some four or five cases; some are associated with glycosuria, some follow phthisis, others are ushered in with nervous symptoms, as head-injuries. It may exist without any sign of disease.

Dr. GREENFIELD showed three specimens of Aneurism dependent apparently upon Embolism. The first was an aneurism, three-quarters of an inch in diameter, at the bifurcation of the basilar artery, which filled up the interpeduncular space, and bulged up the floor of the third ventricle; the vessels of the circle of Willis and the nerves passed close to it, but were not compressed by it. The sac was one-twelfth of an inch thick, covered on the under-surface by a firm coagulum. It produced no symptoms, and was found not to press on important parts. The mitral and aortic valves were much diseased, with filiform and club-shaped vegetations adherent to their surfaces. There were several infarcts in spleen and kidneys, and ecchymoses in intestine and pia mater. Aneurism in this situation is rare, but two cases have been recorded by Semple and Lebert, and Squire has described one of the posterior cerebral artery, which bulged up into the third ventricle. The second specimen was an aneurism the size of a pea, found on a small branch of the carotid artery in the cavernous sinus close to the pituitary fossa; the aneurism had undergone spontaneous cure. There was disease of heart, infarcts in many organs, and recent emboli in some of the systemic arteries. The patient had had hemiplegia two years before. The third specimen was an aneurism of the brachial artery at its bifurcation. The patient, while in the hospital for serious aortic disease, was seized with severe pain and rapid swelling at the bend of the elbow; the brachial artery was ligatured. A large clot was found filling up the space in front of the elbow, and extending between the muscular planes, and a slit was found in the brachial artery extending into both radial and ulnar vessels, the outer and middle coats being extensively ruptured. There were evident traces of an aneurismal sac. Two segments of the aortic valve were adherent nearly to the centre, and a mass of clot, half an inch long, hung down from the valve, and came in contact with one flap of the mitral valve, which at this spot was ulcerated, leading to the formation of a small aneurism in the valve. In the first two cases there was no history of rheumatic fever; in the last case, in which there was such a history, the clinical course of the disease was that of ulcerative endocarditis. In two of the cases there were vegetations from the endocardium close to the valves. Dr. Greenfield also showed two specimens of Cerebral Aneurism to illustrate the connexion of such aneurisms with cerebral hæmorrhage, a point on which Dr. Fagge had recently expressed doubt. The first case was one of fatal apoplexy, in which both lateral ventricles were found filled with blood, which proceeded from the lenticular nucleus of left corpus striatum; from there the clot extended back and up, and reached the surface of the hemisphere just behind the fissure of Rolando. At this point on the surface there was a small hard nodule in the pia mater, which proved to be an aneurismal sac on one of the small branches of the middle cerebral artery; this was ruptured on its deep surface, and on the opposite aspect was covered with a layer of organised clot and inflammatory material. The track of the blood from this aneurism to the ventricle was as distinct as the track of a bullet. The second was a specimen of a miliary aneurism in the left corpus striatum, where there was also found an old hæmorrhage in the right corpus striatum; the patient had granular contracted kidney.

OBSTETRICAL SOCIETY OF LONDON.

THE annual meeting was held Jan. 2nd, 1878, Charles West, M.D., F.R.C.P., President, in the chair.

Dr. ROPER showed a Ruptured Uterus. The patient was attended by a midwife. When the os uteri was fully dilated, and the head nearly on the perineum, a dose of ergot was administered, and symptoms of rupture appeared an hour and a half afterwards. The child escaped into the peritoneum, and delivery was effected by version. The laceration extended through the cervix uteri and upwards as far as the right

round ligament.—Dr. WILLIAMS said he had seen a case in which a similar rupture had occurred spontaneously, when ergot had not been administered.

Dr. HERMAN exhibited the uterus of a woman who had died of Post-partum Hæmorrhage. Her medical attendant had injected the organ with a solution of perchloride of iron — one part to four of water. This was effective for a short time only, and then a rag, soaked with the saturated solution of perchloride of iron, was pushed into the uterus. The specimen showed well the difference in the effect of the weaker and the saturated solution. The upper part of the organ, which had been bathed by the weaker solution, was, on section, unaltered to an extent appreciable by the naked eye, though it was ascertained by chemical tests that the iron had come in contact with it. The lower part of the uterus, which alone had come in contact with the saturated solution, was black, hard, and corrugated, this change extending through the inner three-fourths of its thickness.—Dr. BRAXTON HICKS said that the case showed the truth of the view generally held with regard to the effect of perchloride of iron. Healthy tissue stands the tincture, but not the strong solution.—Dr. CLEVELAND asked what was meant by the term "saturated solution." He had used the strong Pharmacopœia preparation diluted with three parts of water, and thought it effective. The undiluted solution might act as an escharotic.—Dr. EDIS referred to a case of secondary post-partum hæmorrhage where a solution of iron (one to four) had been employed without permanently arresting the bleeding, and in which two drachms of the strong solution of perchloride of iron were injected into the uterus about the tenth day after delivery, and allowed to remain in, the bleeding being arrested at once. The patient made an excellent though a tardy recovery. There was no sloughing or untoward symptom.—Dr. ROUTH said the case brought up the whole question of injection of perchloride of iron. He had used it twice, and both patients died. When injection into the uterus is made there ought to be a free exit. In the case before the Society a solution of one to four was used; it proved inefficient; so it was a bad plan to use a weak solution.—Dr. CORY had used the perchloride in several cases with success, and without bad result, the strength of the solution being one to four.—Dr. HAYES said that the specimen showed that very little of the injection had reached the fundus, from which the blood flowed. In all cases of post-partum hæmorrhage, when perchloride of iron was used, the whole of the bleeding surface should be bathed by the fluid. In order to ensure this the uterus should be emptied of clots, and the injecting pipe carried on the hand and the injection directed against every part of the surface. By introducing the hand into the uterus, and retaining it there while injecting, a free exit was obtained for the fluid. He used equal parts of the solution of perchloride of iron and iced water, and had most satisfactory results.—Dr. BARNES said the point of the syringe should be carried to the fundus. This could only be ensured by introducing the hand into the uterus. Clots should be removed before injecting. One to four is a good strength, but a stronger solution might be used if necessary, but it should not be escharotic. This means of arresting hæmorrhage had stood the test of experience, and had saved many lives. The test for its use is the possibility of exciting reflex action. When this cannot be done use perchloride of iron.

Dr. HEYWOOD SMITH showed parts illustrating Extra-uterine Fœtation. The specimen was referred to Drs. Madge and Aveling to report. Dr. Smith also showed a specimen of Malignant Disease of the body of the Uterus. The patient suffered from menorrhagia and a uterine tumour. The cervix was incised and carbolic acid applied. She rapidly got worse and died.

The result of the ballot for the election of officers for the ensuing year was then declared, after which the President delivered his annual address.

SMALL-POX IN DUBLIN.—This disease appears to be increasing in Dublin, seventeen cases being under treatment last week in the Cork-street Fever Hospital. A child aged six weeks died from it lately who was unvaccinated, notwithstanding that its father had succumbed to the same malady a few weeks previously. This was the third fatal case among unvaccinated children reported during the past fortnight from one district in the city.

Reviews and Notices of Books.

The Care and Cure of the Insane. By J. MORTIMER-GRANVILLE, M.D., F.S.S. Two vols. 8vo. London: Hardwicke and Bogue.

THIS work is founded upon THE LANCET Commission of 1875-6-7 on Lunatic Asylums. It includes the results of that Commission, but these form barely a fourth of it. Indeed, although this work is broadly laid down on the lines of the Commission's labours, the subjects treated by the Commission have been so largely developed in it that the book constitutes essentially a new work, and as such demands notice at our hands.

Judged from the reviewer's point of view, the work is not a little provoking and perplexing. It professes above all things to be a collection of facts, but this profession conveys a very inaccurate idea of the contents. Certainly the substratum of the work consists of a collection of facts as to the general character and efficiency of the provision made for the insane in certain typical asylums, and the conditions of their daily life, which are recorded with scrupulous care and in much detail, securing at once the confidence of the reader in the competency and accuracy of the observer. Yet these facts are accompanied with a running commentary of observations, suggestions, and notes which give vitality to them, but which the author intentionally has not summarised in any systematic form. This arrangement, while it constitutes the peculiar value of the work, renders it difficult for the reviewer to do justice to it, unless he could deal with it chapter by chapter without consideration of space—a condition impossible here. But what forms the despair of the reviewer is, in reality, the advantage of the reader. For Dr. Mortimer-Granville, modestly taking the part of a suggestive, not dogmatic, guide to the conditions of asylum life as it relates to the cure and care of the insane, presents us with a picture of that life as it exists in England, which demands, as no doubt it will receive, the most careful consideration of all persons, whether professional or lay, who have a responsible or personal interest in the asylums of this country. From this point of view alone it would be difficult to overrate the interest of the work. But its interest is not limited to the graphic account which it presents of the conditions of asylum life, their advantages and shortcomings. Beyond this, the work, as it appears to us, may be regarded in three aspects, each of importance, although not each of equal importance. Not that it must be understood that these aspects exhaust the various points of view from which the work may be studied by different readers. The aspects in question simply refer to prominent matters suggested to ourselves on a first perusal of the work, and we proceed briefly to indicate them.

First, as a contribution to the history of the varying conditions of life from time to time in lunatic asylums, the work will have an increasing and permanent literary interest.

Secondly, as a contribution to the arithmetic of asylum life, so to speak, the work has a present value not easy to exaggerate. Those who have at any time attempted to reduce to useful purposes the chaotic tables which in most lunacy reports pass for statistics are alone in a position to appreciate the labour which the author has given to this portion of his subject, and which is conspicuously evidenced by the numerous elaborate tables of figures with which his work is furnished. Dr. Mortimer-Granville clearly sees that until the arithmetical records of asylum life are placed on a secure foundation, deductions as to the results of that life, as concerns the well-being of the patients, rest on a quicksand. He has, therefore, given special attention to this subject for the purpose of elucidating the errors and fallacies which beset the statistics of lunatic asylums as now commonly recorded and manipulated. It is not difficult to understand

that, keenly alive as he is to the numerous sources of fallacy which at present seem to be inseparably connected with lunacy statistics, he should take a gloomy view of the future amendment of them. We think that the author attaches too much importance to the difficulties which are not peculiar to lunacy statistics, but which surround all statistical research, and that he perhaps depreciates too much the value of figures which are relatively rather than actually correct. Statistics of lunacy may be divided broadly into two classes: those which are compiled for the purpose of elucidating the generally asserted proposition that the prevalence of insanity is rapidly increasing, and those which seek to exhibit the result of asylum treatment of lunacy, either through the proportion of cures or recoveries, or through the varying rates of mortality which prevail among the insane populations of asylums. With reference to the first branch of the subject, Dr. Mortimer-Granville states that he has "purposely avoided" its discussion, but, at the same time warns his readers that an actual increase in the number of persons returned as insane, by a variety of authorities for various purposes, does not necessarily signify an actual increase in the proportion of the really insane in our population. The summary tables of the Lunacy Commissioners' Reports show that the total proportion of those returned as insane in England and Wales (including the inmates of public and private asylums and workhouses, as well as those residing with relatives and others) to the population, although continuing to increase, has recently shown a *declining* rate of increase. As regards the second branch of the subject, statistics of the results of treatment, it may fairly be subdivided into statistics of so-called cures and recoveries, and statistics of mortality. Accepting the author's definition of recoveries, — "sufficiently marked improvements to render discharge colourably justifiable and presumably safe," the comparative tables of recoveries in the different asylums dealt with, and during long series of years, with their proportions to admissions, cannot but have definite value. These statistics, however, as well as those of mortality, when dealt with in combination with ages, lose much of their value from the comparison of the mean age at admission of all classes, with the mean age at recovery or death, taken separately, as the case may be. This is especially important in the mortality statistics which the author has constructed with a view to show rather the loss of probable future life due to insanity, than the mortality of lunacy. In order to estimate the probable loss of life among lunatics by Dr. Mortimer-Granville's method, it is essential that the mean age at death should be compared with the mean age on admission of the *same cases*, and not with the mean age of the total cases admitted, and the materials for such a comparison are not available. True calculations of mortality are rendered impossible for want of information as to the ages of the living and the dying inmates of lunatic asylums. Until this information is generally supplied, trustworthy statistics cannot be framed showing the true rates of mortality due to lunacy in different asylums, or in a series of years. No one can be more fully alive than the author to the unsatisfactory nature of much of the statistical material on which he has had to work, but it cannot be doubted that the accumulation of recorded facts which he has collected and tabulated forms a most valuable contribution to the study of this branch of statistics. Indeed, striking evidence of this is furnished by himself, as is shown by the following conclusion (among others) which we believe to be fully justified by the data he gives—namely, "that there has been no substantial improvement in the results obtained [in the treatment of insanity] since the abolition of restraints"; but, on the contrary, "what amounts to a positive diminution of the proportion of cases [of recovery]—when the general condition of the mass of patients under treatment is fully considered—seems to be the consequence of a recourse to measures which promised high and increasing success."

Thirdly, the preceding quotation seems to us to touch the core of Dr. Mortimer-Granville's book. From first to last he regards his subject from the point of view of the practical physician. The lunatic presents himself to him primarily as a subject for *cure*, and secondarily, and in a remote sense only, as a subject of *care*, in the signification in which that word is ordinarily used, as housing the lunatic safely under restraint as regards himself and others. He shows clearly and incisively that, even in this year of grace, the difficult problem has not yet been solved of securing to the incipient or actual lunatic his *medical* as well as his *legal* rights, and that the former are still subordinated to the latter. Notwithstanding the great advances which have been made in recent years in the general conditions of asylum life, and the provision for the care of the insane, these, as we have seen, do not appear to have exercised any perceptible effect in promoting the *cure* of the insane. Two principal causes have contributed to bring about and to promote this result. First, the medical treatment of the insane in asylums is practically a treatment in mass, not of individuals; secondly, the legal restraints imposed upon the insane—or, rather, the fashion of their imposition—has had the result of withdrawing insanity from the ordinary studies of medical men. Thus it has happened, and is now the fact, that lunacy in its incipient state, when its recognition and treatment are most necessary, has scarcely a chance of being either recognised or treated curatively; and that, when lunacy has become declared, it is, as a rule, dealt with, not as an individual case requiring individual care, but as one of a group of cases. We must refer to the work itself for the instructive detail of the circumstances which perpetuate this state of things. It would have been well that the author should have entered more fully into the question of medical education in lunacy. Possibly he reserves this subject for separate treatment. The supineness of our great medical examining bodies and of the General Medical Council in this matter would have been amazing if it were not their normal condition. It seems to have escaped attention that medical education as to infectious diseases is drifting into a condition somewhat similar to that as to lunacy. The increasing isolation of such diseases in hospitals detached from the schools of medicine is interfering gravely with clinical instruction in them. Not long ago a consultation was held in one of the great metropolitan hospitals on a new and previously unobserved form of skin disease, which proved to be small-pox! Need we wonder after this as to some of the recent revelations in the reports of the Army Medical Department and elsewhere of the too common want of clinical knowledge of enteric fever, and other infectious diseases, manifested by young men sent to India fresh from the English schools of medicine?

In closing this notice of Dr. Mortimer-Granville's work we would refer to the unusual excellence of its typography, and especially to the typographical execution of the statistical tables.

The Aryan Origin of the Gaelic Race and Language. The Round Towers. The Breton Law. Truth of the Pentateuch. By the Very Rev. ULICK J. BURKE, Canon of Tuam Cathedral. London: Longmans.

THIS work commences with a strong plea in favour of the study of the early Irish language and traditions, and of the early Irish monuments. Canon Burke believes that the first immigrants who made Eire their home came from the East, and that the language which they spoke was Aryan, identical at that early period with the tongue known and spoken in the valleys of Persia, and eastward to the banks of the Indus. He dwells at considerable length on the causes which have led to its general disuse, and advances some

powerful arguments for its study. He is most enthusiastic in regard to both its antiquity and its value; and he writes with such energy, such thorough mastery over and such love for his subject, as to make his book, which is on a rather dry subject, exceedingly entertaining.

The author holds most decided opinions in regard to the Round Towers, a disquisition on which is introduced, oddly enough, into his work. The Pagan period, he says, "may be divided into two: the remote and the late Pagan period. It is certain, from all that has been just stated in these pages, that the Round Towers had been the work of men skilled in the art of building; and we have seen that mankind possessed greater knowledge [?] some two thousand years before the Christian era than they possessed at a later period. The Round Towers must therefore have been built at that time when men were best skilled in science and the arts of building." We should hardly have thought, from our inspection of Round Towers, which we admit to have been cursory, that such prodigious ability was required for their construction, or that their elevation was incompatible with the knowledge of architecture of the earlier centuries of the Christian era; but we are aware that we tread on tender ground, and should be sorry to touch Canon Burke's sensibilities.

Atlas of Human Anatomy. With Explanatory Notes by Professor C. E. BOCK (Leipsic). Containing 38 coloured plates, &c. Imperial 4to. London: Renshaw. 1878.

THIS work has already reached a sixth German edition, and is well known and much appreciated in Continental schools. We are not surprised that it has now been reproduced in this country. It is quite true that many excellent anatomical atlases have been published in England by English authors, but they are in many instances of large and not convenient size, besides being costly; though, of course, life-size portraits have their special advantages. The present Atlas is of moderate and conveniently portable dimensions, and, considering the number and character of the plates, it must be regarded decidedly as a cheap publication. The work is a most complete one as regards the illustrations, embracing all parts of the body. It contains plates of the bones, muscles, vessels, and nerves; the organs of sense, the eye, ear, nose, and tongue; the respiratory apparatus; abdominal and pelvic viscera; organisation of the fœtus; the teeth; and the genito-urinary organs of the male and female. We have examined these plates with considerable care, and are highly pleased with them. They are beautifully executed, even to the minutest details; indeed, they are quite works of art. It is true the parts are not represented life-size, but with such execution they are sufficiently large to show accurately even the minor details and the exact relation of the different organs and structures pourtrayed. The descriptive letter-press is confined to the explanation of the main features of the plates, and therefore the Atlas should be used in connexion with some descriptive anatomical book. The work will be found of real value, on account of the number of its illustrations, the accuracy of its delineations, and the moderate cost, both to the student to aid him in his studies, and to the practitioner as a work of reference as regards anatomical details with which he may feel that he is not at the moment conversant.

SINGULAR CLAIM AGAINST A MEDICAL MAN.

ON Tuesday, 15th inst., an action was brought in the Brompton County Court, before Serjeant Wheeler, judge, and a jury, by Mr. Thomas Myles Beale, M.R.C.S., of the Uxbridge-road, Hammersmith, to recover the sum of eight guineas for professionally attending the family of the defendant, Mr. George Richards, who resides in the same locality. Mr. E. Newman, solicitor, appeared for the plaintiff; Mr. Young, barrister, for the defendant, who preferred a claim, as set off, for £13 12*s.* 6*d.*, for funeral expenses of two children, railway-fare to the seaside, &c. Defendant also claimed £35 damages for alleged negligence on the part of the plaintiff, "and for the loss of defendant's two children."

Mr. Newman, in opening the case, said the plaintiff was the medical officer of a club of which the defendant was a member, and in June, 1876, defendant consulted Mr. Beale, stating that he had a very bad sore-throat, and felt generally unwell. Plaintiff advised him to stay at home for a few days, but he disobeyed this injunction, and subsequently it was found that the complaint from which he was suffering was scarlet fever. One of the children was subsequently attended by Mr. Beale for the same malady, and a little girl was treated for debility. In all, the doctor made forty-five visits, for which he had charged the very moderate sum of eight guineas, and it was not until he had twice rendered his account that the extraordinary allegations and counter claim were made against him. Mr. Beale was a medical man of large practice and good reputation, and, of course, it was very necessary that he should disprove the allegation of incompetence which was levelled against him.

The plaintiff said he had been in practice twenty-two years. In June, 1876, he attended the defendant as medical officer of his club, and in that month, as well as in July of the same year, he attended his son, Stanley Oswald Richards, for scarlet fever. The child died from blood-poisoning, the after-effects of the fever. He afterwards attended defendant's little girl for debility, and she recovered. In the course of the illness of the above-named children the defendant asked the plaintiff if one of his other children should go to the sea-side. The plaintiff said, certainly not. In spite of this the defendant took the child to Ramsgate, where it had the fever and died. The plaintiff never attended this child, but the defendant claimed a railway fare on its account, and damages in respect of its death.

Mr. Newman then called medical evidence to show that scarlet fever was very difficult of detection in its first stages, and that the plaintiff, in directing the defendant to stay at home as it were for a probationary period, had acted quite rightly.

The jury, without leaving the box, found a verdict for the plaintiff for the amount claimed, and against the defendant's counter claim.

His Honour said he felt sure that they all sympathised with the defendant in his affliction, but it was a serious, and, in fact, dreadful charge against a medical gentleman, which he quite agreed with them could in no way be sustained.

The defendant in this action is entitled to the praise of being an ingenious man. It is a very ingenious way of meeting a claim in respect of medical services to make a counter claim founded upon the failure of those services to avert death. The result of this device, however, is happily not such as to encourage others to repeat it. Of course the sooner scarlet fever is diagnosed the better; but, as Trousseau says, "scarlatina is more variable in its forms and symptoms than any other of the contagious exanthematous fevers. Of all diseases scarlatina is that which is most frequently defaced." We all know that there are cases in which scarlet fever is made manifest only by desquamation or by anasarca. A sore-throat accompanied with general ailment does not constitute scarlet fever. The device of the defendant here was not only ingenious but bold, inasmuch as the advice of the medical man was repeatedly disregarded. The boldest part of the defendant's conduct was in making a claim in respect of the child who died at Ramsgate, never having been attended by the plaintiff, and sent there in opposition to his strong advice. Such bold ingenuity defeats itself, and it is gratifying to note the quickness with which judge and jury saw through the matter.

SUPERANNUATION GRANTS.—The Town Council of Ipswich have granted to Mr. Charles Frederick Long an annuity, by way of superannuation, of £100 for ten years, on his resigning as medical superintendent of the Borough Lunatic Asylum from ill-health.—Dr. Thomas Massy has obtained a superannuation allowance of £50 per annum on resigning as medical officer for the Ravensdale Dispensary District of the Dundalk Union, Co. Louth.

THE LANCET.

LONDON: SATURDAY, JANUARY 26, 1878.

AT the time of the Crimean war the want of a large and suitable hospital for the reception of the sick and wounded sent home to this country was greatly felt. The hospital at Fort Pitt, the general invaliding establishment of the army at that date, was too small, and, from its construction, quite unsuited for the purpose. A site was purchased at Netley on the banks of Southampton water, and the large and handsome building, the Royal Victoria Hospital, was erected, capable of accommodating 1000 sick, and with all the necessary offices for the efficient working of an invaliding establishment. Although there were differences of opinion as to the eligibility of the site and the principle of construction which was adopted, it must be admitted that Government spared no expense to provide a hospital for the sick and wounded worthy of the country. It was not completed and fit for occupation till 1864, when the invalid establishment was transferred to it from Chatham. One of the great advantages of the new hospital was its removal from a garrison town and from the noisy vicinity of barracks, with all the temptations and facilities for introducing into it spirits and other forbidden articles. In addition to the hospital, the medical school for the instruction of officers entering the service in those special duties which cannot be taught in the civil medical schools was also removed to Netley. The hospital has been appropriated in time of peace to the reception of the invalids of the army from foreign stations, who are retained in it until they become fit for duty, and are sent to the depôts of their regiments, or deemed to be permanently unfit for military duty and discharged the service. The change from that ill-placed and unsuitable hospital at Fort Pitt to Netley was attended with much benefit to the service and comfort to the unfortunate invalids. Subsequently, in an evil hour, it was determined by the military authorities to remove the depôt for "time-expired men" from Chichester to Netley, and quarter them in one of the wings of the hospital. The ground of removal from Chichester was, we believe, that the barracks there were required for a brigade depôt, but surely some more suitable place could easily have been found than the great invaliding hospital of the army. Aldershot would have been, for very many reasons, infinitely preferable. It is too well known, unfortunately, at Netley that these time-expired men, with accumulated arrears of pay, are but too eager to get rid of it in the public-house, and the amount of drinking which goes on among them is simply disgraceful. They have no military duty to do, and there are no means, except the cells, of enforcing discipline. Some of these men are kept there for months until their time is up, loafing about, and doing as much harm as they can. Mr. HARDY has shown so much good sense in carrying out the new organisation of the Army Medical Department, and so much consideration for the soldier, that we cannot believe the absurd arrangement of occupying part of a great hospital as a barrack can have been brought under his consideration. We trust that some of the medical members of Parliament will call his attention to it, and obtain the removal of what we cannot consider as anything but a scandal. It could easily be remedied, either by transferring the whole establishment of the "time-expired depôt" to Aldershot, where the men could be employed on military duty, and would be subject to military discipline; or the men, on arriving in England, might be sent at once to the depôts of their regiments, where they could be employed and cared for until finally discharged. By the latter course the cost of the time-expired depôt might be saved, and if that were counterbalanced by the expense incurred in sending the men to their depôts, it would have the good effect of keeping them out of mischief, and prevent them, as at present, bringing discredit upon the service, and inflicting a serious injury upon a most useful institution for the benefit of the poor fellows who are sent home in broken health.

Very recently the military commandant at Netley retired upon a pension, and we were in hopes that Mr. HARDY would have taken the opportunity of extending to Netley the principle he has so well carried out at the station hospitals, of holding the medical officers responsible for the discipline of their hospitals; but we saw with regret in last week's *Gazette* that a new commandant has been appointed. We have no doubt the time-expired depôt has been made the excuse by the Horse Guards for saving this little bit of patronage; but we trust that Mr. HARDY will, in the interests of the sick soldier, speedily make arrangements for the separation of two such incompatible establishments as a barrack for idle, unemployed soldiers, and a hospital for unfortunate invalids whose health has broken down from the effects of foreign service. We always understood it was Lord CARDWELL'S intention that "time-expired men" should join their depôts, where their characters are known, and where they can be well looked after by their own officers, instead of being sent to a place where no one either knows or cares for them. But such a course would lead to the breaking up of an expensive staff, and the abolition of a few snug appointments now in the gift of the Horse Guards, and is therefore out of the question.

THE opportunity now, unfortunately, occurs of testing the value of the work done by the International Sanitary Conference, which sat at Vienna in 1874, for the purpose of coming to some common agreement as to the means of protecting Europe from cholera. Although the Conference proposed an international convention, framed on the results of its proceedings, this proposition does not appear to have been carried out. Probably the appearance of cholera in Mecca and Jeddah may bring this question to the front again, and lead to steps being taken for the completion of a convention such as the Conference recommended; meanwhile the principles of action set forth so authoritatively by the Conference should not fail in the present circumstances to exercise as important an influence over the nationalities concerned as if the convention had been signed. Although the Conference concerned itself solely with cholera, it cannot well be doubted that the measures of precaution it advised and agreed to, apply in principle equally to plague. The Conference made a cardinal distinction between the precautions which should be had recourse to before cholera had entered

Europe, and after the disease had become established on the Continent. In the former case it allowed that certain measures of quarantine might be of value, but it practically expressed the opinion that such measures could only be applied with a probability of success in the Red Sea and the Caspian Sea. In the latter case—that is to say, after the invasion of Europe—it concluded by a large majority that measures of quarantine were not merely useless, but mischievous; and it proposed a system of medical inspection of shipping founded upon the practice which obtains in English ports. Nevertheless, in view of the fact that a minority of the representatives were not favourable to this modification, and were prepared to advise their governments to retain quarantine, it suggested a modified system which would get rid of some of the more obnoxious features of the old system. This modification was accepted by several of the supporters of quarantine.

Now, if ever quarantine, even in the modified form recommended by the Conference, and in one of the localities where the Conference deemed it might properly be applied, is to justify itself, surely the existing state of things offers the opportunity. The question as it applies to cholera, now present in the sacred land of Mahomedanism, and the shutting out the disease from Egypt and other countries bordering the Mediterranean, presents the conditions almost of an arranged experiment. The disease, apparently part of an advancing epidemic, is confined to the Hedjaz. The opportunities for such control as the Egyptian Government may exercise over the approaches to Egypt from the Hedjaz, both by land and by sea, are as complete, probably, as could possibly be found. If quarantine fails here to check the progress of cholera into Egypt and the countries bordering the Mediterranean, it ought to be accepted without hesitation by guaranteeing nations that quarantine is a wholly unjustifiable embargo upon international communications.

It must be observed, however, that a fallacy may underlie the experiment. Is there any good reason to believe that the outbreak of cholera at Mecca and Jeddah is but a step in an advancing epidemic, and that unchecked the disease would, as aforetime, spread in the track of pilgrims returning from the pilgrimage? May it not be that the extension of the disease to Mecca, as has happened before, is the limit of the present dispersion, and that the power of further diffusion may be lost at Mecca? Now, every spread of cholera beyond India has been of world-wide extent. If such should be the case, as here suggested, quarantine at Suez, at Kosseir, and on the Egyptian frontier of the Hedjaz, might have the virtue assigned to it of arresting the progress of a disease which had in fact stopped from causes beyond our cognisance and control. It ought, however, to be possible to eliminate this source of fallacy in judging of the results of quarantine against cholera in the Red Sea. At any rate, the necessity for such elimination must not be lost sight of.

The rites of the recent pilgrimage to Mecca would fall upon the 13th, 14th, 15th, and 16th December. On the 17th December the pilgrimage would end, and the pilgrims begin their return homewards. The number of pilgrims present at the rites has been comparatively small, probably not exceeding 40,000. Of these, less than a third, perhaps, would be destined for Egypt and for countries in the Mediterranean reached by way of the Suez Canal. The important and anxious experiment (so to speak) now in progress in the interest of Egypt and of Europe could not have been carried out under more favourable circumstances, and the result will be looked for with profound interest.

A QUESTION in pulmonary pathology of considerable scientific interest and direct practical bearing is raised by some observations published by Professor NOTHNAGEL in VIRCHOW'S *Archiv*. They relate to the passage of cells from the alveoli of the lung into the interstitial tissue. When extensive hæmorrhage occurs into the trachea of a rabbit, such as takes place when the trachea and carotids are divided simultaneously, the lungs are found gorged with blood. The bronchial tubes are full, and the alveolar tissue is of a dark brown-red colour. The blood is not equally distributed; there is always most in the vicinity of the hilus. On microscopical examination of the hardened lung, it was found that the blood was mainly in the bronchial tubes and air-cells, which were most of them stuffed with corpuscles, a few being free. But there was also a large amount of blood in the interstitial tissue of the lung, between the alveoli, and even in the interlobular septa. In places this accumulation was so dense as to mask the normal structure of the lung. Although some of the interalveolar septa contained no corpuscles, the nodal points of the septa invariably presented accumulations. In these spots the connective-tissue framework is normally more highly developed. The appearance of the lung suggested an interstitial hæmorrhage, with rupture, and escape of the blood into the air-cells. Indeed, so considerable was the interstitial accumulation that it seemed possible that the process had actually been of that character—that the convulsions which preceded death might have led to interstitial hæmorrhage. Some observations were therefore made on rabbits killed by dividing the carotids only, the trachea being left intact. No interstitial accumulation could, however, be discovered, and, of course, there was no blood in the air-cells. Hence it seemed clear that the blood had passed into the interstitial tissue from within the alveoli.

A remarkable feature of the phenomenon was the rapidity with which the passage occurred. The anæmic convulsions came on in three-quarters of a minute after the severance of the carotids, and ceased in a minute and a half. Immediately afterwards the thorax was opened, and the lungs removed and thrown into absolute alcohol. The whole period occupied was not more than five minutes. Whatever be the mechanism, all movement of cells or fluids must cease as soon as the alcohol acts upon the tissues.

That particles passed with readiness from the air-cells into the interstitial tissue had been previously shown by INS in his experiments to ascertain the mechanism by which grinders' phthisis is produced. He found that cinnabar dust, introduced into the air-passages, could be discovered within the nodal points of the interalveolar septa in from six to twelve hours after its introduction, and that some granules had passed into the bronchial glands.

The path which the blood-corpuscles traverse in their migration could not be discovered. But we know that channels exist capable of affording ready ingress for solid particles from the air-cells into the interstitial tissue.

WYMODZOFF, KLEIN, and others have shown that the commencement of the lymphatic channels are in immediate communication with the alveolar and bronchial spaces. NOTHNAGEL'S observations show that these openings must be extremely numerous to permit the rapid passage of so many corpuscles into the interstitial tissue. He suggests that it is possible that the dilatation of the air-cells by the blood may dilate the stomata which exist in their walls; since in every case the chief interstitial accumulation took place where the air-cells were the most distended with blood.

The immediate application of these observations to the elucidation of many processes of disease will be sufficiently obvious. The light similar facts throw on the occurrence of interstitial lung changes, as the result of inhalation of fine particles of stone, &c., was pointed out by INS. Another important consideration, which flows more immediately from NOTHNAGEL'S observations, is the question of the absorption of the exudation in croupous pneumonia. It is probable that in the process of the resolution of pneumonia, only a small part of the exuded material which fills the air-cells is expectorated. A greater quantity must be absorbed. The common assumption is that the contents of the alveoli, white and red corpuscles, and fibrin, undergo fatty degeneration, and that the products of this degeneration are absorbed. NOTHNAGEL suggests that the cells may find their way back into the lung vessels without undergoing degeneration. He admits, however, that the interference with the circulation in the inflamed lung may constitute a difficulty in the acceptance of this view, and we think that the facts of the post-mortem room are opposed to it. All pathological evidence goes to show that destruction by degeneration of the exudation precedes its removal from the air-cells, by whatever process that is effected. CORDUA, in his investigation into the method by which extravasated blood was removed from the tissues, was able to demonstrate its return into the vessels only so long as it remained in a fluid state.

The destination of blood effused into the air-cells is a very important element in the pathology of the origin of phthisis from hæmoptysis. It must be confessed, however, that these observations do not increase our knowledge of the pathological processes which underlie such a condition; indeed they diminish rather than increase its probability. NOTHNAGEL, in some early but unpublished observations, had failed entirely to produce lung changes by injecting blood into the air-passages of the lungs of the rabbit. No caseous pneumonia was found either days or weeks after the injection; neither was there any blood in the minute bronchial ramifications, in spite of the fact that rabbits neither cough nor expectorate. These observations entirely agree with the negative results of PERL and LIPMANN. The experiments of SOMMERBRODT were less conclusive. He believed that under some conditions hæmorrhage into the lungs would cause a catarrhal pneumonia and phthisis. All, however, agreed that the contents of the bronchi and air-cells were very small in quantity compared with the amount of blood they must have contained, and the explanation of this is completely afforded by the observations of NOTHNAGEL. Admitting the fact that hæmoptysis may, in man, sometimes lead to phthisis, these observations—if we may transfer them to the human lung—show very clearly why such a consequence so seldom follows the hæmorrhagic infiltration into the air-cells which must very often take place.

IT is rumoured that the projected measure for the better administration of counties, which will probably be laid before Parliament immediately after it has entered upon its labours, may include provisions dealing with certain sanitary matters, and especially that it will provide for the appointment of county medical officers of health. The rumour as to the appointment of county medical officers of health appeared to us, in the present state of local sanitary administration, so wild, that we should have hesitated to add to its currency, were it not that it comes from sources that we cannot hold to be uninformed in the matter. The appointment of county medical officers of health, as part of a consistent scheme of local sanitary administration, is one thing, the appointment of such officers simply in addition to existing local sanitary arrangements, as we understand has been projected, is another and very different thing. The rumoured proposition must not, in fact, be confounded with that which has been for some time familiar to the more advanced sanitary reformers. These gentlemen contemplate the county medical officer of health as the co-ordinating agent, through the means of a County Board, of the different local sanitary authorities of the county, each of which, severally or in combination, has its own local medical officer, who reports to the county officer as well as his own authority, and has in the former an adviser and supporter in the performance of his duties. This view presupposes that the local arrangements are made in definite subordination to the functions of the county officer, and that the County Board is empowered to exercise a certain control over the local authorities, so as certainly to secure the co-ordination contemplated, and otherwise to bring about efficiency in the performance of their sanitary duties. Moreover, in that view the county medical officer would not be a medical officer of health in the strict sense of the term. He would be an inspecting and superintending officer, to whom it would be desirable to give certain forensic as well as sanitary functions. The rumoured measure would, however, appear to have in contemplation a very different sort of officer. This officer would be appointed as a medical officer of health presumably exercising the functions now ordinarily required from such officers, and it would seem to be assumed that such an appointment by a county board would in some mysterious manner tend to remove the anomalies of the present arrangements for local sanitary administration, and overcome the difficulties to which these give rise.

We have no hesitation in saying that if any such course be followed the confusion of local sanitary organisation and administration will become still more confounded. We do not believe that other than additional confusion must follow from attempts at further legislation touching general sanitary organisation without a full inquiry into the present state of that organisation, and the causes of frustration of the Public Health Act of 1872. There is abundant evidence to show that it is not only the question of local sanitary organisation which is at issue, but the question of local sanitary administration, both of the authorities themselves and of

their officers. The latter question is one for even more serious consideration than the former, for it would clearly be futile to amend organisation if it gave no security for an amended administration. It can scarcely be doubted that a great number of the new sanitary authorities appointed in 1872 are performing their functions in a most perfunctory manner at the best, and that the local rates and imperial exchequer are saddled with costs in these districts for which there is no proper return. It will be idle to have recourse to legislation with a view of abating this evil until it is known whether it has its sources in matters which legislation will touch. Some part of the evil it is known has its origin in the action of the Local Government Board when under the presidency of MR. STANSFELD, and there is no good reason to suppose that this would be affected by legislation. As a preliminary step to further general sanitary legislation, we believe it to be essential, if the legislation is to be other than a further source of confusion, that a Parliamentary inquiry should be instituted as to the working of the Public Health Act, 1872. Until this has been done we feel assured that Parliament will approach the subject in the dark, and that further legislation will lead to further confusion in our sanitary administration.

Annotations.

"Ne quid nimis."

THE ADMISSION OF WOMEN TO THE UNIVERSITY OF LONDON.

A CORRESPONDENT of *The Times* has this week pointed out, as we have frequently done, that it is really the desire to admit women to the medical profession which has prompted the whole question of the higher education of women and their admission to the degrees of the University of London. He alludes to the significant fact that the Senate had refused its University honours to women until the Russell-Gurney Act was passed, when it at once conceded to women the privilege of practising medicine. These words, indeed, touch a vital question, which neither the Senate, in all its arguments, nor Convocation, has endeavoured to controvert. The Chancellor, in that "circular" which gave such an impetus to his cause, but which excited, even amongst moderate men of all sides, no little pain, stated that the Russell-Gurney Act was adopted so hastily because the Medical Faculty seemed to demand immediate reform in the direction of admitting women; but this lame excuse cannot blind any but enthusiasts. The Chancellor forgot to explain that—to use his own words—Convocation had "repeatedly voted for the admission of women to the degrees of the University," so that the Senate might long ago have asked for the new charter; and, further, to explain that all senators who were prepared to adopt the Russell-Gurney Act were not in favour of the new charter—in fact, that some of these had voted against it. There can be no question that the opening of the University degrees is a special legislation—in reality, concerning only the medical profession. The University degree in Laws will give women no right to act as barristers or solicitors; but the several legal gentlemen who supported the new charter with such vehemence never alluded to this fact, and have never by word or deed agitated to break down the barriers which keep women from the legal profession. It may well be asked, then, why the medical graduates are taunted above all others as wanting in a "liberal spirit." We do not charge any section of graduates with acting from the motives imputed unfairly to the medical graduates, but we do think that many who voted for the new charter did so without giving the whole question a thorough consideration.

The vote, which, if acted upon, will reduce the University of London to a mere licensing body from the high position it has hitherto held, concerns not only the University, which, we fear, will have to pay a heavy penalty for its new policy, but the whole medical profession and the whole public. There cannot be a doubt that the profession, by a large majority, condemns the encouragement of women in a line of study which, no matter what enthusiasts may advance, is calculated, when pursued by women, to demoralise the country. The step recommended by the University of London will, if carried out, disturb the groundwork of our social life, and teach men to regard women with less reverence than has always characterised this and all other countries of any pretensions to be considered civilised. We will not dwell on the repugnant work which awaits all female candidates for the London University's qualification to practise medicine. "The women want to be doctors, so let them be doctors," is one of the strongest arguments advanced in favour of their pursuing this work—an argument as foolish as it is fallacious, and one we need not discuss. Another equally extraordinary argument was used in Convocation, "The time has come for settling this controversy, so, though we doubt its good, let us vote for the new charter."

We mention these things because, though we have not seen the division-list of Convocation, we know that "side issues," which one speaker so strongly deprecated, were not kept out of the question, but really played an overwhelming part. Thus graduates totally opposed to the admission of women voted for the charter for the sake of "peace"; others who had their "doubts" voted for it; and there can be no doubt that Lord Granville's circular brought to Convocation a number of men never before seen there, and who voted in accordance with that circular, but had given no consideration to the question. It should not be forgotten that nearly three hundred graduates protested in May last against the admission of women to medical degrees, these belonging to the medical faculty alone, and that the majority in Convocation which carried the new charter included only 242, the minority being 132. Thus it is clear that this vote, strong though it apparently was, cannot justly be considered to represent the views of Convocation. The vast majority of graduates cannot attend meetings of Convocation, and they are debarred the right of voting by proxy, even on such important questions as the surrender of the University charter. Who will declare that the vote might not have been different from the one we regret had all members of Convocation been able to share in it? In any case no one will dispute that in this direction, at least, there is room for "reform" in the University.

VICTOR EMANUEL AND BLOODLETTING.

FROM time to time the details of the fatal illness of some eminent person in Italy call public attention to the maintenance there of the practice of venesection in acute febrile diseases. The system has been uniformly abandoned in every other country which can be considered to have shared in the progress of medical science and practice that has marked the last twenty years. In Italy it is retained with pertinacity, even—as the latest example shows—in the highest, and presumably the best informed, circle of medical practice. Can the practice be justified by any special feature of Italian pyrexia? The system is applied equally to natives and to strangers, and therefore cannot be regarded as indicated by the constitutional state of the individual. An English traveller who becomes ill in an Italian town is bled, to a certainty, if he is febrile. We doubt profoundly if there is

any justification for the practice in the character of the Italian fever. Venesection is advocated on the grounds which were held to justify the retention of the practice in this country, and were universally recognised as fallacious as soon as the advantages of its abandonment were seen. There can be little doubt that in Italy at the present day venesection is responsible for a great number of the deaths from acute febrile diseases. But to what extent the death of the late King is to be attributed to the abstraction of blood is a doubtful question. It is certain that in this country he would not have been bled. It can hardly be doubted that the venesection was wholly without influence for good, and it is possible that it aggravated the disease. But we are informed that the amount of blood removed was small, not large, as some of our contemporaries have asserted, and the progress of the disease was so rapid, the attack so severe, that it is probable, under any circumstances, the King must have succumbed. The question of the utility of venesection is one of great importance for the Italian faculty. It leads to the universal distrust by foreigners of Italian physicians, who are not otherwise, as a rule, ill-informed.

EPILEPSY AND "RESPONSIBILITY."

IT is of the greatest moment that the relations of epilepsy and insanity—or that condition of mind which gives immunity from the obligation of answering for the actions performed, presumably, in obedience to the will—should be clearly understood. A case, involving a nice question of personal responsibility, has just engaged the attention of the Court of Assize at Cambridge. A letter-sorter was charged with abstracting letters from the mail. He had accumulated a considerable quantity of valuables which he does not appear to have appropriated to his use or benefit, and this circumstance was relied upon to support the theory that he was not a common thief, but the victim of disease. A history of epilepsy, though the fits were not numerous, seems to have given support to the hypothesis raised. We are not prepared to assert that the criminal in this case was irresponsible, and as he has been sentenced to penal servitude for five years, it is probable that he will be kept under observation long enough to determine the facts of his condition without inflicting any irreparable injury upon the individual. Nevertheless, the question involved is one of surpassing interest. It does not seem to be sufficiently well known, particularly on the judicial bench, and at the bar, that even slight seizures of the epileptic type gradually, but certainly, undermine the judgment or will, and leave the mind a prey to those brute passions which man possesses in common with the lower animals. It would appear that, under the influence of this terrible malady, the higher faculty of self-control is suspended, and the victim becomes less than human. We have repeatedly insisted that it is the least well developed faculty which falls first before the paralysing invasion of disease. This consideration has a direct practical bearing upon the question of "responsibility," and cannot be wholly overlooked in the judicial view. If a man reduces himself by neglect or vice to the condition of an incapable being, whether the paralysing agent be disease or a drug that intoxicates, he cannot, in the interests of society, be allowed to plead temporary unconsciousness as an excuse for what may follow. He is responsible for the cause, if not for the result. We should not of course hold that a confirmed epileptic is accountable, but we are not able to say that, in our judgment, a man or woman is irresponsible because he or she happens to have occasional fits. There may be progressive depravity of the moral sense, but, for practical purposes, it must be remembered that this lowering of the instinct of judgment and self-control—and blunting of the sense of right and wrong—is of a nature analogous rather to the depravity of vulgar and vicious tastes and proclivities than the incapacity of advanced mental disease. In the earlier stages of epileptic and paralytic affections we are inclined to think the law has a distinct and reasonable claim upon the obedience of these so-called "lunatics," and such discipline as they may receive in a well-conducted penal establishment will be helpful instead of injurious. What is so much needed is not that cases of this class should be sent to asylums rather than to prisons, but that every medical officer in the public service should be able to bring special knowledge of mental disease to bear upon the proper management of their individual conditions, and to apply the required principles of "moral treatment" to their relief. It would, we think, be an evil of no small magnitude if the plea of insanity were set up without due reason, or on sentimental grounds. The great want of the day is a medical tribunal to decide these questions *before* the case is arraigned at a legal bar. By such a tribunal medical evidence would be submitted to tests incomparably more severe than any which can be applied by a lay judge or an unskilled jury, however intelligent and painstaking.

THE PUBLIC HEALTH (IRELAND) BILL, 1877.

ON the 9th inst. a deputation from the Public Health Committee of the Corporation of Dublin had an interview with the Chief Secretary of Ireland for the purpose of drawing his attention to various amendments which they believed will be of benefit in the Public Health (Ireland) Bill, which is to be reintroduced this session. Mr. Gray, M.P., chairman of the committee, referred to the high death-rate of Dublin, and said that the committee thought that there should be only one central authority empowered to deal with sanitary matters. There should also be power to levy in the city a distinct rate for sanitary purposes, instead of trying to defray the expense out of the borough fund. Suggestions were made about sewers and drains, the committee desiring that power should be given to deal with them, to regulate the construction of new buildings, and the management of slaughter-houses. It was pointed out that Clause 144 of the Bill provided a penalty against any person "showing for the purpose of letting" any house in which there had been infectious disease, provided that the person who was negotiating asked a question on the subject. The Committee thought that the Bill should go further, and make it incumbent upon the person seeking to let a house in which there had been infectious disease to give notice of the fact. They also considered that the owners of all classes of lodging-houses, including hotels, in which dangerous disorders broke out, should be compelled to give notice of the fact to the sanitary officer. Clause 114 provided a penalty against any person who "knowingly" sent a child to school for a certain period after it had suffered from any infectious disorder. The word "negligently" might with advantage be substituted for "knowingly," because it would be very difficult to prove knowledge. The maximum penalty of 40s. for such an offence ought to be increased to £20, in order that poor and rich might be dealt with according to their means. Conductors of schools, also, should be obliged to give notice of the outbreak of dangerous disorders in their schools. Clause 146 imposed a penalty for neglect of vaccination, but the Committee thought that there should be power to impose cumulative penalties for repeated refusals to vaccinate. They also recommended the introduction of a clause prohibiting wakes. Sir Michael Hicks-Beach, in reply, said that last year he was obliged to withdraw the Bill, after it had been carefully considered by a Select Committee, on the understanding that the measure should be reintroduced this session precisely as it was left—that is, that it should be allowed to pass to the same stage which it had occupied when it was withdrawn, and that then

any further amendments which might appear to be necessary should be discussed. He therefore felt himself precluded from reintroducing the Bill in any shape different from that in which it emerged from the Select Committee; but between the reintroduction of the measure, and the date at which discussion would take place, there would be ample time for him to consider the various suggestions that had been made.

THE INCREASED METROPOLITAN DEATH-RATE.

DURING the first three weeks of this year the annual death-rate in London averaged 27·0 per 1000, whereas in the nineteen large provincial towns also dealt with in the Registrar-General's Weekly Return, the death-rate did not average more than 24·7 per 1000. The rate in London is so usually below the average rate in the nineteen provincial towns, which have an aggregate population almost equal to that of London, that it is worth noting a few of the main features of the recent excessive metropolitan rate. In the week ending the 19th instant, the 1903 deaths registered in London exceeded the corrected average number for the corresponding week in the last ten years by 215, and were equal to an annual rate of 27·8 per 1000, a higher rate than had prevailed in any week since the beginning of April last. The deaths from all causes exceeded the average by 21 per cent., and while the deaths referred to diseases of the respiratory organs showed an excess of 42 per cent., the excess from all other causes of death was not more than 14 per cent. The low temperature which prevailed during the week ending the 12th instant thus appears to be mainly responsible for the increased death-rate in London, although the fatal prevalence of small-pox, measles, and whooping-cough, and an unusual number of deaths from different forms of violence, contributed to swell the excess. During November and December the death-rate in London was unusually low, and many persons in indifferent health survived, who would have succumbed to more usual and seasonable weather. The moderately cold weather of the second week of January, probably, therefore, only claimed for victims a proportion of those whose lives had been prolonged by the preceding mild weather. In the face of these exceptional fluctuations it is satisfactory to bear in mind that, whereas the death-rate in London averaged 24·4 per 1000 during the six years 1865-70, it decreased to 22·9 in the following six years 1871-6; while in 1877 the rate did not exceed 21·9 per 1000. While small-pox epidemics and the unduly fatal prevalence of measles and whooping-cough still afford evidence of defective sanitary organisation, sanitary progress in London is an undeniable fact.

EARS AND EYES.

IT has always been a question with many thoughtful persons whether evil or good is likely to preponderate from popularising natural science. An article by Mr. Norman Lockyer in the current number of *Macmillan's Magazine*, on "Ears and Eyes," contains most of the merits, with not a few of the faults, of popular expositions of abstruse scientific truths. The technicalities of physical and physiological acoustics and optics are aptly overcome by the employment of familiar terms and happy similes, but at the price of occasional looseness and even inaccuracy of expression. The extreme simplicity of many of Mr. Lockyer's illustrations shows that he understands his readers, and knows what they require. But he sometimes indulges them too far. The parallelism traced between sound and light is instructive up to a certain point; beyond this its employment is misleading. And here the danger manifests itself of attempting to teach the higher truths of science to non-scientific persons, who are often unscientific too. To obviate the necessity of abandoning popular phraseology, both accuracy and precision are sacrificed. A strict analogy is said to exist between the world of sound and the world of light. There is, of course, some analogy between colour and musical-pitch, inasmuch as differences between colours, like differences between musical-pitch, depend on difference in the length and frequency of their respective vibrations, but in almost every detail the relation between colours is widely different from the relation between sounds. Nor is it strictly correct to say that of an imagined or rather imaginable compound sound composed of notes of all possible pitch we have an exact equivalent in the case of white light, which gives a continuous spectum. As another illustration of one of the evils attending attempts to make popular science attractive, we quote the following peroration to a description of the spectroscope:—"Here, indeed, we are in the presence of a new music of the spheres, to which our *eyes* are rapidly becoming attuned. As in the old one, 'cycle on epicycle, orb on orb,' are still the vibrating chords in the heavenly chorus; but the cycle is the cycle of the atom, and the orbs are no longer distant suns dwarfing our imaginations by their vastness, but the ultimate molecules of matter." Grandiloquent, but not scientific!

MEDICAL EXAMINATIONS FOR LEGAL PURPOSES.

A CASE before Mr. Justice Denman, at Manchester, on the 21st inst., is important as showing that the law is not well defined with respect to the liability of medical practitioners instructed to examine patients for legal purposes. The complainant in this case was a woman who had been charged with having abandoned her infant a few hours after its birth. The practitioner called in was, at the instigation of the "Vigilance Association for the Defence of the Personal Rights of Women and Children"—an organisation designed to oppose the working of the Contagious Diseases Acts,—proceeded against for examining the complainant against her will. It was alleged that she was forcibly held. The evidence did not support the theory of coercion, but pointed to consent, and the jury found for the defendant. Nevertheless, the legal ruling of Mr. Justice Denman goes to prove that no medical man may suppose himself armed with authority to proceed contrary to the express will of the person he is instructed to examine. "Personal rights" are superior to the power of a court of magistracy! We wonder whether the authorities of prisons have any legal right to photograph prisoners? It is time these discrepancies of law and "order" were adjusted. As the matter now stands, grave scandals may arise, and medical men may be placed in an extremely painful predicament, by too confidingly assuming that the order of a justice is clothed with an authority it does not possess. He may be cast in an action for doing his duty, or be committed for contempt of court if he omits it.

ADVERTISING DOCTORS.

WE fear there is a growing indelicacy which permits medical men in one form or another to advertise their skill, and even their drugs. It is lamentable to see the various forms which this advertising system takes. Sometimes the advertisement appears in quite the ordinary form, in a newspaper. We have two or three specimens before us as we write. Some of them are colonial. "Dr. So and So may be consulted daily at Mr. So-and-So's, chemist. Advice eighteen pence; medicine eighteen pence." The advertiser boasts of being L.R.C.P. and L.R.C.S. of Edinburgh. "Mr. John ——, surgeon, London and Edinburgh Royal Colleges. Hours of consultation 10 to 12 A.M., 2 to 4, and from 7 to 8. Intermediate hours devoted to visiting practice." There is a

fine vagueness, by the way, in the statement about the colleges here. But that is no disadvantage in an advertisement. We have said some of the specimens are colonial. But some of them are not. Here is a specimen from a country newspaper: "We understand that Dr. ——, senior physician to the —— here, is practising as a consulting physician. 934." The figures are a mystery, but may have some reference to the folio of the ledger of the newspaper in which the worthy doctor is debited to the extent of a few shillings in consideration of this "We understand." If he repeats the advertisement, as no doubt he will not, he should pay a little more to have the figures omitted. The advertisement would then read more like an independent paragraph showing some public interest in the doctor's mode of practice. At present it has the mark of a thing paid for, and which would never be the subject of a newspaper paragraph if it were not paid for. But probably a double fee might command the omission of the figures. Surely the senior physician should set a better example. We call upon all medical men, at home and in the colonies, to discourage by every means this tendency. It is a part of the price that a professional man has to pay that he is not to assert himself in the public prints, either directly or through the medium of injudicious friends. It is out of the question that a man should be at liberty to advertise his scientific opinion. If its value is not made known in the quiet ways of practice it is not likely to be made evident by an advertisement.

GENERAL PRACTICE IN THE COUNTRY.

THE *Spectator*, on the subject of doctor's charges, says:—"We are on the side of the doctors for once." Our contemporary says a good many strong but true things in the course of his article on the subject. His picture of practice in the country is not such as to attract young men whose idea of life is to "live at home at ease," but it is not much exaggerated:—

"The doctor, unlike any other professional man, is not at liberty to fix a definite price for his work, and tell his customer either to pay his price or go without the article he wants. The positive laws of the profession, public opinion—which upon this subject is quite relentless—and that feeling of pity for suffering without which a doctor is comparatively useless, alike make it imperative to attend any pressing case, and to charge a low price where a heavy one cannot be paid. Unless, therefore, the charge is exceedingly low, uniformity cannot be secured; and if it is exceedingly low, able young men will not enter upon a profession so thankless as that of a general practitioner in the country. There is no such life led by educated men. A general practitioner in a country district, to make £500 a year by the time he is forty, must be out all day every day and half the night, in all weathers, upon all roads, in an open vehicle; must abandon all notion of regularity, and almost any notion of study, and must be at the beck and call of patients of whom one-half at least will never pay him for the cost of his horse's shoes."

In cases, by the way, where the element of poverty does not call for special consideration, we do not see why the doctor, like any other professional man, should not be at liberty to fix a definite price for his work. What is more, it would be very much for the benefit of the profession, and by no means injurious to the public, that the doctors who are conscious of the value of their work should put a price upon it that will make the public value it more. The public spends far too little over doctors. Compare what is spent by a comfortable family on luxuries, for the most part injurious, with the sum paid by it for medical opinion, which represents all that is good in hygiene, in morals, and in medicine. There is far too little independence among the leaders of the profession. We do not mean by the leaders of the profession merely the Court physicians of London, but the best men in every district, be it town or country. They owe it to themselves and the profession to make themselves not quite so cheap, and, at the distinct cost of losing, or, rather, by deliberately giving up, an ungenerous patient now and again, to assert that medical care and skill must be paid for.

THE PHYSIOLOGY OF THE PANCREAS.

A PAPER appears on this subject by MM. Afanassiew and Pawlow, in the last part of Pflüger's *Archiv*, in which they discuss the advantages of permanent as compared with temporary fistulæ, awarding the palm to the former; and having decided this, they set themselves to ascertain the innervation of the pancreas. From analogy this gland might either receive special excitory nerves, or its secretory activity might be regulated by the vaso-motor system, or both sets of fibres might coexist. The existence of a vaso-motor system of nerves is indubitable; it remained to demonstrate the presence of proper secretory nerves. As a means of settling the question, they resorted to Heidenhain's plan of investigating the action of atropine and of stimuli of various strength upon the secretory activity of the gland and upon the concentration of the juice. Control experiments, made by testing the juice soon after food and during fasting, showed them that the secretion of solid and of fluid constituents is due to two different processes, subject to two sets of nerves, by one of which the chemical work of the pancreatic cells is governed. On injecting atropine the secretion was always checked, and in some instances completely inhibited. They consider the evidence of the presence of proper secretory nerves to be quite irrefragable. They next proceeded to inquire whether, admitting the accuracy of Bernstein's statement that irritation of the vagus inhibited the pancreatic secretion, this inhibitory influence is due to a direct action, or was indirectly referable to the pain caused by stimulation of the nerve. Their experiments satisfied them that sensory irritation of the skin was capable of inhibiting the secretion of the pancreas.

THE LONDON SMALL-POX EPIDEMIC.

AT the beginning of October last the epidemic of small-pox in London appeared to be rapidly dying out, and the small-pox patients in the hospitals of the Metropolitan Asylum Board had declined to 137. Since that date, however, the disease has again showed a steadily increasing prevalence and fatality, and during the past four weeks the small-pox patients in these hospitals have rapidly risen from 309 to 468. The new cases admitted to these hospitals during the three weeks ending 19th inst. were 129, 124, and 129 respectively. The deaths from small-pox in the metropolis, which had been remarkably stationary during the eight weeks ending 12th inst., and ranged between 25 and 35, rose to 51 in the last week under notice, which exceeded the highest weekly number since the middle of June last. The 51 included 30 in the Metropolitan Asylum Hospitals, and 21 in private dwelling-houses; most of the latter occurred under circumstances which rendered successful isolation of the deceased patients practically impossible, and thus made each fatal case a probable fresh centre of infection. It appears from the Registrar-General's last Weekly Return that, after distributing those occurring in hospital, the 51 fatal cases included 6 belonging to Pancras, 7 to Islington, 4 to Hackney, 7 to Stepney, 6 to Mile-end Old Town, and 5 in Camberwell. Of the 6 in Mile-end Old Town, 5 occurred in private dwelling-houses, as did 4 of the 7 in Islington, and 3 of the 5 in Camberwell. Of the 51 fatal cases, 25 were certified as unvaccinated and 14 as vaccinated, while in the remaining 12 cases the medical certificates gave no information as to vaccination. Eighteen of the fatal cases were of infants and children under five years of age, of whom 11 were certified to be unvaccinated, and 6 were "not stated" as to vaccination. Nine of the 16 cases occurring between the ages of twenty and forty years were certified to have

been vaccinated in infancy, although in no case was re-vaccination recorded. The fatality of small-pox also showed last week a marked increase in the outer ring of suburban districts, where 12 deaths resulted therefrom, including 9 in West Ham, 2 in Willesden, and 1 in Croydon sub-districts. In the 19 provincial towns furnishing weekly returns only 2 deaths from small-pox were recorded during the week ending 19th inst., of which 1 occurred in Norwich, and 1 in Manchester.

BIRMINGHAM PROVIDENT DISPENSARY.

A SERIES of regulations has been printed and widely circulated by a committee, with the avowed object of establishing provident dispensaries in Birmingham. It would be difficult to conceive a set of rules better calculated to encourage improvidence amongst the people, and to act unjustly to the medical profession. All persons, whatever their income, are to be admitted to the privileges of the dispensary on paying 1*s.* per quarter, over fourteen, and 6*d.* per quarter under that age. The committee, on which medical officers are not to have seats, are to deduct at least 25 per cent. from the members' payments before dividing them amongst the medical staff. The midwifery fee is fixed at fifteen shillings, but members may have the attendance of a midwife on payment of 7*s.* 6*d.* It is directed that the medical officers shall assist the midwife in case of difficulty if she should require them, and, in this case, shall receive from the fund set apart for expenses payment upon a scale to be decided upon by the general committee. The effect of this regulation must necessarily be to encourage members to retain the midwife for the 7*s.* 6*d.* fee, with the certainty that if a surgeon be required they can command his services without paying him anything. He is certainly promised something at the discretion of the committee, that something to be deducted out of the twenty-five per cent. reserved from the members' payments to meet expenses.

This scheme has been hatching nearly six months; yet no steps have been taken to submit it to the medical profession, though their chief local Society made an offer of co-operation at the very commencement. A meeting to consider the whole subject has been convened for four o'clock next Thursday (the 31st inst.), in Queen's College, Birmingham. As it stands, the scheme perpetuates some of the worst features of gratuitous and underpaid medical services. If it can be justly and usefully amended, the sooner that is done the better.

DANGERS OF INFLAMMABLE VOLATILE LIQUIDS.

THE following case, which recently occurred at Lyons, together with some comments that it has called forth, is of practical interest in these days, when ether is so largely used as an anæsthetic. A young lady, eighteen years of age, was about to undergo an operation requiring the actual cautery. (The *Revue de Thérapeutique* from which we quote does not give details of the operation.) Anæsthesia was produced by ether, the vapour of which became ignited by the heated iron, and the patient was severely burnt about the face, the burn involving the tissues close to the upper jaw. The operator, in extinguishing the flames, was himself much burnt also. A similar accident might happen if ether be poured from a flask near to a naked light, or if collodion be applied in the same dangerous proximity, &c. The *Lyon Médical*, in commenting on this subject, points out that the risk involved not only occurs during operations about the face, in close contignity with the ether-inhaler, but, owing to the density of the vapour of this fluid, as much danger is involved in employing heated cauteries or lighted candles at a distance, as long as these are below the level of the inhaler. A guarded light, on the principle of the Davy lamp, might be used as a precautionary measure; but for operations involving thermo-cauterisation it would be better to discard the use of ether entirely, and employ chloroform.

THE VACCINATION ACT.

A SEVERE case of small-pox has just occurred at Gravesend, which brings prominently forward what appears to be a grave omission in the Vaccination Act.

A child, eight or nine years old, was taken ill with this disease some three weeks since. On inquiry it was found that he had never been vaccinated, and that an elder brother and sister were also in the same unprotected state. Application was at once made to the father, who certainly did not withhold his consent, and the two were immediately vaccinated with success. At the same time he expressed his disbelief in the protective character of the operation.

As two cases in other houses have since made their appearance in the town, the medical officer of health applied to the guardians to take proceedings against this man for neglect of duty in not complying with the law by submitting his children for vaccination. It was found, however, that no case could be made out against him, as the law seems to affect only those who persistently refuse to obey it, and that default or neglect does not come under its cognisance as punishable so long as the friends do not refuse, when the unprotected individual is discovered, to have it done.

On reference to the penal section this will be quite evident. Yet, surely, this is a great mistake. The consequences which the Act was passed to prevent have here occurred. The disease has broken out, and the parents are apparently not responsible, or, at least, not punishable, though their neglect is palpable, and of the worst description.

THE WATER-SUPPLY QUESTION.

THE medical officers of health for Wandsworth in their last annual report, in dealing with the question of the water-supply of the district, complain that filtration has not been efficiently carried out; that the filter-beds have been improperly constructed, and the water has been taken constantly from the Thames in whatever condition it happened to be and poured on the filtering surfaces without any subsidence of the heavier particles; in fact, it is alleged that, at times, water has been passed into the mains which has not been in any way filtered. Again, the Vauxhall Company is charged with making no attempt to comply with the Act of Parliament, by providing a constant service of water, and so obviating the necessity of the cistern system. The following suggestions are made in the report—namely, the adoption into the New Public Health Bill of a clause providing for the proper inspection and control of cisterns by an officer of the local authority, and the amendment of the law regulating the power of the water examiner, by giving him authority to stipulate for quantity as well as quality of the metropolitan water-supply.

THE HEALTH OF HACKNEY.

A FAVOURABLE report of the public health and the sanitary work accomplished in the Hackney district has been given by Dr. Tripe, the medical officer of health. It is estimated that the number of inhabitants of this district amounts to 157,250. The deaths fell from the average of 20·0 per 1000 during the six years 1871 and 1876 to 19·6 in 1877. The later figure includes 173 deaths from small-pox. The births were in the proportion of 178 to 100 deaths. With regard to sanitary work we are told that 6191 houses were inspected, and 6257 nuisances abated, of which 1380 arose from defects in drainage, 3314 from dirty or dilapidated houses, and 1563 from other causes. We should like to know, however, how many among these nuisances were

discovered in common lodging houses. These latter, being under the supervision of the Scotland-yard authorities, are well watched, and much is done to improve their condition; but local authorities are often remiss when dealing with private property, which is not specially affected by Act of Parliament, as in the case of the common lodging-houses. We hope that Dr. Tripe does not include the common lodging-houses of his district among the 6191 houses inspected.

BILLS BEFORE PARLIAMENT.

THE following Bills, of more or less direct interest to the medical professions have been laid before Parliament:—Bill to consolidate and amend the Acts relating to public health in Ireland (Sir M. Hicks-Beach); Bill to consolidate and amend the law relating to factories and workshops (Mr. Cross); Bill to amend the law relating to county infirmaries and to the relief of the poor in Ireland (Mr. Meldon); Bill to facilitate the control and cure of habitual drunkards (Dr. Cameron); Bill to prohibit the sale of intoxicating liquors on Sunday (Mr. Charles Wilson); Bill to amend the Medical Act, 1858 (Dr. Lush); Bill to make provision for the more effectual prevention of cruelty to animals (Mr. Holt); Bill to amend the laws relating to the common sale of intoxicating liquors in Ireland (Mr. O'Sullivan); Bill to prohibit the sale of intoxicating liquors on Sundays in Ireland (the O'Conor Don); Bill to amend the Public Health Act, 1875 (Mr. A. Brown); Bill to make provision for the purchase by the Metropolitan Board of Works of the undertakings of the several water-companies supplying water to the metropolis, and to certain places in the neighbourhood thereof, and for the supply of water by the said Board to the metropolis and to such places, and for other purposes relating thereto; also a Bill to amend the Metropolis Management Act, 1855, the Metropolitan Building Act, 1855, and the Acts amending the same respectively (Sir J. M'Garel Hogg); Bill to amend the law relating to the granting of licences for the sale of spirits and other intoxicating liquors in Ireland (Mr. Meldon).

EXHAUSTING LIBERALITY.

A COMPLAINT has been raised in the daily press that committees of hospitals sell stock to meet current expenditure, instead of imposing such restrictions on the extent and nature of their charity as to bring outlay within income. This is an old charge, but we are not sorry it has been revived. A correspondent of *The Times* points out that "during the year 1877 the governors of the London Hospital have been compelled to sell out £21,770 stock, besides borrowing nearly £5000, in order to meet the current expenses." We reserve comment on this fact, but it is significant. The remedy suggested is a more eclectic policy of relief to the sick. How far it may be possible to reduce the expenditure of a hospital by the refusal of cases it will be worth while to inquire at an early period. For the moment it must suffice to draw attention to the matter, and insist on the gravity of a method of financing which consists on living on capital rather than retrench.

DOVER GUARDIANS.

IT is well that those of the medical profession who are in the habit of recommending a sojourn at Dover as a means of recruiting health should be aware of the attitude of some of the leading people in the borough towards such a well-tried precautionary measure as vaccination.

At a meeting of the Board of Guardians, on the 18th inst., one of the guardians (Mr. Eastes) drew attention to a bad case of small-pox in the town, and mentioned that it was considered desirable by the medical man in attendance that the people in the district should be revaccinated, in which case an order from the board was necessary. The chairman (Mr. Rees), however, thought the people were sufficiently wise to know when they required to be revaccinated without any order from the board. "It was enough to be poisoned once in their life. No one could tell the depth of the ignorance of these doctors on the point of vaccination." This is rather an important utterance from the chairman of the Board of Guardians of one of the acknowledged sanatoria of England, and we recommend it to the attention of the Local Government Board, and those medical men who are in the habit of sending patients to Dover for the good of their health.

"NAVAL MEDICAL REFORM."

THE *United Service Gazette* professes itself surprised and aggrieved by our strictures on the subject of Naval Medical Reform. We have been at once too reticent and too outspoken. We do not insist with sufficient energy upon certain matters of detail, while we claim too much in the demand for independent medical authority. No useful purpose is likely to be served by entering into a formal discussion with our lay contemporary. Suffice is to say generally that we cannot admit the competence of naval men to take or refuse medical advice at their discretion; and we again assert that the recommendations of medical officers should be "orders" carried out, under their direction, by agents responsible to the medical authority. The notion of naval officers sitting in judgment upon medical recommendations, and adopting or refusing them at will, is as absurd as would be the spectacle of a medical court of appeal deciding questions of seamanship. The naval service may rest assured that the aim of all parties will be best secured by each department keeping strictly within its own authority, and recognising the claims of the other.

THE MARSHALL HALL MEMORIAL.

THE time for awarding the Marshall Hall Prize—viz., the next annual meeting of the Medico-Chirurgical Society in March—is now approaching. The Council has appointed the honorary librarian, the secretaries, and Dr. William Ogle, a committee to bring suitable names before the Society for the award.

GOLDEN-SQUARE HOSPITAL.

ALTHOUGH it is now many months since their Royal Highnesses the Prince and Princess of Wales withdrew their patronage from the Throat Hospital, Golden-square, circulars bearing the name of His Royal Highness as patron have been issued from this institution within the last fortnight. We may expect to hear more of this.

THE battle of the pavements is not yet over in the United States. A short time back it was thought that wood was the best material, and many miles of it were laid down in the large cities. Now wooden pavements are condemned, the material being said to rot and stink; and asphaltic or bituminous pavements are extolled. They are said to be "firm and elastic, noiseless, clean and dry, smooth yet rough, permanent yet easily removable, non-combustible, durable, cheap, and readily obtainable. They also conserve the public health."

DURING the progress of a football match at Paignton, on the 19th inst., between the Torquay and South Devon and the Torquay Athletic Football Clubs (says the *Totnes Times*), Dr. Searle, of Brixham, playing in the former team, sustained a serious injury to the shoulder blade. At first the bone was thought to be broken, but it turns out fortunately that the injury was only a sprain. The play is described to have been on both sides of the roughest nature.

A REPORT of the sanitary condition of Teddington during the year 1877 has been issued by Dr. Günther, medical officer of health. Estimating the population of Teddington at 5945, the annual death-rate for the period was 15·47 per 1000. This is a satisfactory figure enough, but it is startling to find it stated that of ten samples of water analysed the greater part were found to be "polluted and unfit for domestic purposes." In the report—which, by the way, is exceedingly brief—Dr. Günther records the refusal of the Kingston Board of Guardians to comply with a request that copies of the district medical officer's weekly returns should be supplied to him. The request was a most reasonable one, and it would be interesting to learn the objections which the guardians can have against furnishing information of what disease there may be going on amongst the poor to the medical officer of health.

THE action taken by the Chelsea guardians with the view of establishing a seaside institution for the reception of poor persons in the metropolis suffering from scrofula and other diseases requiring sea air for their successful treatment does not at present seem likely to have a successful result. The Chelsea Board invited the co-operation of other guardians in urging the desirability of such a measure on the Local Government Board, but the reception accorded to the communication cannot be regarded as very encouraging. The Marylebone Board, in considering the question, appeared to think that the enlargement of the existing sea-bathing institution at Margate would do much good, but did no more than acknowledge the receipt of the letter from Chelsea.

THE Secretary to the Sub-committee of the Royal Medical and Chirurgical Society on the relations of Diphtheria and Croup desires us to state that the Committee are anxious to obtain the notes of any case in which the formation of false membrane in the air-passages has succeeded upon a definite exposure to cold, and will be greatly indebted to any gentleman who will favour them with such information. They would also be glad of a specimen of the larynx and trachea, or of expectorated false membrane, from such a case, either in a fresh condition, or preserved in spirit, Müller's fluid, or other suitable reagent. Cases and specimens should be sent to Dr. Greenfield, secretary to the committee, 93, Wimpole-street, W., or at the Society's Rooms, 53, Berners-street, W.

IN one respect, at all events, the inhabitants of Greenock seem to be in advance of the general population of the British isles—namely, in the appreciation of the need, in the public interest, of reporting cases of infectious disease. Dr. Wallace, medical officer of health of the town, in his last monthly return, states that out of a total of 145 cases of infectious diseases of all sorts ascertained by the officials, as many as 79, or 54 per cent., were reported by householders to the authorities. Another statement in the report of a noteworthy character is that of 74 families invaded by measles, 44 failed to seek medical advice; of these, however, 19 voluntarily made known the existence of the disease to the health department.

DR. THOMAS I. ROWELL has been appointed principal medical officer in the Straits Settlements. This appointment, we understand, has been made by Lord Carnarvon simply on the ground of the sterling qualities, professional and other, which Dr. Rowell has given evidence of possessing during his practice at Singapore, where he has been residing for some years.

THE Conjoint Scheme is being expedited; another meeting will be held at the Royal College of Surgeons on Monday next to further consider the report to the several medical authorities on the regulations for carrying out the scheme.

THE decease of two distinguished French *savans* has just been announced—M. Becquerel, whose researches in electro-chemistry are well known, and who obtained the Copley medal of the Royal Society; and M. Regnault, who, commencing his career as a mining engineer, afterwards obtained a world-wide reputation as a physicist.

WE have great pleasure in stating that the Queen has been pleased to appoint Alfred Hudson, M.D., to be one of the Physicians in Ordinary to Her Majesty in Ireland, in the room of the late Dr. Stokes. We congratulate Dr. Hudson on the well-merited honour.

THE Metropolitan Asylums Board contemplate erecting extensive new buildings at Darenth for the reception of female imbeciles. The proposal met with some opposition at a late meeting of the Board, but eventually a motion in favour of the step was carried by a majority of 13 votes.

DR. FRANCIS WARNER and Dr. GILBART SMITH are, we understand, candidates for the newly created post of sixth assistant-physician to the London Hospital. Dr. Warner has held the office of Medical Registrar for the past year.

THE temporary small-pox hospital in Dodd-street, Limehouse, after having been whitewashed and thoroughly disinfected, has been given up to the owners.

THE statue of Sir John Cordy Burrows in the Brighton Pavilion grounds is to be unveiled on Thursday, Feb. 14th.

New Inventions.

WORDSWORTH'S NEW PATENT "WASHABLE" RESPIRATOR.

THE great inconvenience which arises from the difficulty of cleansing the ordinary respirator is so well known that it serves often to prevent the recommendation of these useful appliances to patients requiring them. The present respirator, which is manufactured by Messrs. Lynch and Co., of Aldersgate-street, is made entirely of vulcanite and bone, and can easily be taken to pieces and scrubbed thoroughly with a nail-brush. It consists essentially of two perforated frames, the one falling into the other, and so shaped as to most conveniently cover the mouth. Between the two perforated frames is enclosed a layer of cotton-wool, which can be renewed from time to time without difficulty. This wool can be saturated with disinfectants, if thought necessary, or with any other volatile material, the inhalation of which may be recommended by a physician. The thickness and closeness of the layer of cotton-wool can also be regulated to suit the requirements of the patient. We think this exceedingly simple invention is well worthy of trial, and we have no hesitation in bringing it to the notice of the profession.

"NEW ILLUMINATING LAMP."

To the Editor of THE LANCET.

SIR,—Perceiving in your impression of January 5th that Messrs. Salt, of Birmingham, have brought under your notice a new illuminating lamp for medical purposes, we beg to say that we have had the pleasure of supplying some hundreds of these useful articles to the profession since 1873.

There is only one difference—namely, that our lamps are furnished with a nickel-plated portable case, which, when desired, not only makes a better base for the lamp, but also forms a reservoir to carry the oil.

We have the honour to be, Sir, your obedient servants,

January, 1878. J. WEISS & SON.

THE HEALTH OF THE NAVY.

THE Statistical Report of the Health of the Navy for 1876, just issued, forms a portly volume of 613 pages. Of this number 397 pages belong to the Report, and 216 to an Appendix separately paged. It is not easy to understand why this separate paging, which greatly complicates a work of reference, should be adopted in a book which is, in fact and in intention, a single volume. The Report abounds in interesting matter; and in the Appendix, in addition to other subjects, are found two important reports—one a continuation of Dr. Messer's inquiry into the reputed poisonous nature of the arrows of the South Sea islanders, the other giving a series of returns showing the number of cases of venereal diseases in Her Majesty's ships stationed in five home ports at which the Contagious Diseases Acts have been and are in operation, and the number of cases in Her Majesty's ships at five home ports at which the Acts have never been applied, from the year 1860 to the year 1876 inclusive.

The following is a general summary of the statistical medical returns of the Report:—The total force employed in the service afloat, in 1876, corrected for time, was 45,010, of which 23,260, or 52·47 per cent., were between the ages of fifteen and twenty-five; 14,430, or 32·09 per cent., between twenty-five and thirty-five; 5640, or 12·53 per cent., between thirty-five and forty-five; and 1320, or 2·93 per cent., over forty-five years of age. The average number of men sick daily was 2148·95, which is in the ratio of 47·74 per 1000, and is an increase, compared with the preceding year, equal to 1·34 per 1000.

The total number of cases of disease and injury entered on the sick list was 53,908, which is in the ratio of 1197·58 per 1000, and is an increase, as compared with the previous year, equal to 38·58 per 1000. Each case was, on an average, 14·58 days under treatment on board ship and in hospital.

The total number of days of sickness was 786,517. This gives an average of loss of service from sickness equal to 17·47 days for each person of the total force, and shows an increase, as compared with the preceding year, to the extent of 0·57 days.

The total number invalided was 1636, which is in the ratio of 36·34 per 1000 of force, and is an increase, compared with the preceding year, of 1·94 per 1000.

The total number of deaths was 416, which is in the ratio of 9·24 per 1000 of the force, and is an increase, compared with the previous year, equal to 0·44 per 1000. The number of deaths from disease was 270, which is in the ratio of 5·99 per 1000, and is a reduction, in comparison with the previous year, to the extent of 0·91 per 1000. The number of deaths from disease was 270, which is in the ratio of 5·99 per 1000, and is a reduction, in comparison with the preceding year, to the extent of 0·91 per 1000. The number of deaths from injury was 146, which is in the ratio of 3·24 per 1000, being 1·34 per 1000 higher than the ratio of deaths from similar causes in the previous year.

One of the most interesting portions of the Report relates to the outbreak of scurvy among the crews of the ships engaged in the Arctic expedition. The account given of this outbreak is clear, precise, decisive, leaving nothing to be desired. The reporter observes, in summing up the history of the occurrence: "In considering the origin of this serious outbreak, it is not possible to escape from the conclusion that its primary cause was the omission from the dietary of the sledging parties of a sufficient supply of the antiscorbutic elements of food. No lime-juice was included in the dietary, and the quantity of preserved potato and other vegetables carried was very small."

Two facts relating to terminology arrest the attention in going over the Report which deserve a passing notice. A non-fatal case of choleraic disease, which occurred in the *Defence*, when lying at Gibraltar, is spoken of as a case of the malignant form of cholera; and an outbreak of diarrhœa, accompanied with urgent tenesmus, among the crew of the *Favourite*, coastguard ship, at Queensferry, is described as "choleraic diarrhœa." Now, choleraic diarrhœa is a form of malignant cholera. As such the term is used in the Nomenclature of the Royal College of Physicians. There can scarcely be a pretence that the disease on board the *Favourite* was of this nature, and it is to be regretted that a well-defined designation should thus be loosely used. If the isolated case of choleraic disease on board the *Defence* is to be regarded as "malignant cholera," it is difficult to know what limitation is to be put upon the use of that term in choleraic affections.

We quote the general summary of contrasted syphilis returns. The table needs no comment.

Ratio of Syphilis contrasted.

		Ports under the Acts.			Ports not under the Acts.		
No Acts in force	1860–63... ...	75·02			70·05		
Act of 1864 in force	1864–65... ...	79·12			100·		
Acts of 1866 and 1869 in force	1866–70... ...	47·19	Primary	34·72	84·74	Primary	59·14
			Secondary ...	12·47		Secondary	25·6
	1871–76... ...	41·67	Primary	29·56	93·92	Primary	69·06
			Secondary ...	12·1		Secondary	24·86

THE MEDICAL ASPECTS OF THE WAR.

THERE is a curious dearth of information this week as to the condition both of the Russian and of the Turkish troops in the field. As to the shocking state of the Turkish prisoners in Roumania, the following news is given by the special correspondent of *The Times*, in a telegram from Giurgevo, dated Jan. 16th. He says:—"On passing the hospital tents which cover the plain around Fratesti station we met an officer's funeral on one side; then we came upon a pile of twenty rough coffins waiting for their occupants; and, finally, the crowning horror was reached a few hundred yards from the station, where we found a party of Russian soldiers digging huge graves, and near them four ghastly piles of Turkish dead, numbering at least fifty bodies, lying in heaps of four and five feet in thickness, with their ragged and half-clad forms entangled in horrible confusion, as they had been emptied out from the dead-carts. The mounds in other places showed that this fearful pile represents days of fatality, and the frosthites visible on the naked limbs gave evidence of the hardships these poor fellows had suffered on their march from Nikopol. The mortality has been fearful among these prisoners of war, and the plains of Fratesti are becoming thickly dotted with mounds covering the mortal remains of those who defended Plevna. The station of Fratesti is becoming a terror to travellers between Bucharest and the Danube, and, even if there is nothing worse than ordinary typhus lurking around those canvas dwellings, the mortality induced by the graves of those who have passed away justifies the feelings of apprehension felt by those who pass by this vast abode of the sick and the dead."

The following is from our correspondent in Bucharest:—

"Bucharest, 9th January, 1878

"Since I wrote to you last, many changes have taken place. The brave Osman Pacha has passed through wounded and a prisoner. The Emperor has made his triumphant entry, and our own Prince has returned safe and well, and met with a cordial welcome from his people. Lately, the whole aspect of Bucharest has changed. For so many months we have been accustomed to seeing Russian uniforms in the streets; now the Turkish fez crops up everywhere. Ten thousand prisoners are allotted to this country. God only knows how many have 'fallen by the way,' but when they arrive here they are tended and cared for equally with our Roumanian

soldiers. As to the little English hospital, we received orders from the War Minister to fill up our vacant beds with Turkish sick, instead of Roumanian wounded, as we had expected. Twenty-one poor wretched sufferers came to us a few days ago. They had walked from Plevna, and when they arrived the thermometer was 15° below zero. Barefooted, and insufficiently clad, their state was pitiable. Two of them, Dr. Mawer thought, would die, but they gradually came round. They were all suffering either from dysentery, bronchitis, or frost-bitten feet; the greater part from two of these maladies. Dirty, and covered with vermin, we scarcely liked to put them in our nice clean beds. The task was trying even to those who are not over-fastidious. The toes of some of them dropped off as Dr. Casey was dressing their frost-bitten feet. They are now classified and put into separate wards. When they are stronger, some amputations are to be performed. Daily, toes are removed which are only attached by a tendon. In the assistance I have been able to give, four words of Turkish carried me a long way. We have now an interpreter, who comes for a short time daily. There is one magnificent Kurd who touches his forehead and kisses my hand every time I go near. The said hands are always covered with dark gloves, as I am so often obliged to raise the poor fellows from their pillows to administer medicine and food. The young sisters of charity are admirable in all their repugnant duties. A Turkish officer came in the other day to have his feet dressed, clean, well dressed, and very pleasant-looking. Through the interpreter he asked the doctor to go and see a fellow officer of his, who was ill at an hotel close by. The visit was made, and the invalid officer requested to be taken into our little hospital; so yesterday morning we arranged a comfortable bed near a stove, and his friend brought him. He went through the regulation undressing, and dressing in drawers, night-shirt, and flannel dressing-gown. A young Roumanian lady bound his bad feet, the doctor gave him medicine, and we were leaving him to rest, after having received his profuse thanks, when he motioned to me, and touched his pillow, making me understand that he required a second. This brought, he took out of his bag his Koran, placed it on the pillow before him, put on his spectacles, and commenced his devotions, which really seemed from the heart, not a matter of mere form.

"We have agents here from nearly all the Relief Societies. Every one is doing good work, some on a very extensive scale, as their resources also are large. It would be invidious were I to go into details, but I cannot abstain from mentioning the practical, useful knowledge, and the gentle, kindly feeling which pervades the work done by the Rev. Mr. Samson, one of the committee of the Russian Aid Society. This gentleman's son, Dr. G. Samson, has given us often, and continues to give, his valuable surgical services when at Bucharest. Dr. Casey, an American surgeon travelling for his pleasure, has laid us under a debt of gratitude, for he has tended our wounded twice a day for many weeks. All these gentlemen assisted at the visit which the Prince and our gracious Princess did us the honour to pay to our little hospital on Tuesday last. Their highnesses were received by the Roumanian patients with cries of 'Long live our Prince!' He said a kindly word to each, and the Princess with her own hand pinned on to the breasts of some of them the star of the Order of Merit. The Prince expressed himself as very pleased with everything, and repeatedly thanked Dr. Mawer for what he had done.

"To those ladies who, in answer to Mrs. Mawer's appeal, kindly sent her contributions for the bazaar for the benefit of soldiers' widows and orphans, she begs me to tender through you her sincere thanks, and to say that the bazaar quite equalled her expectations. Already 200 francs each have been sent to ten different ladies, and they have asked to lay it out in wood and other necessaries for this rigorous season, and to give it to the most deserving objects. Contributions for our 'Roumanian War Victims' Relief Society,' or specially for sick Turkish prisoners, will be most thankfully received, and may be sent to the National and Provincial Bank of England, 53, Baker-street, or to Dr. Mawer, Caimater, Bucharest."

THE "Army and Navy Gazette" says that a Fleet Circular is about to be issued giving to Inspectors-General and Deputy Inspectors-General of Hospitals and Fleets increased relative rank, so as to place them on an equality with their corresponding ranks in the Army.

Correspondence.

"Audi alteram partem."

A DISCLAIMER.

To the Editor of THE LANCET.

SIR,—May I trouble you to correct the following statement, which appeared in *The Times*, and other papers, on Monday last:—

"THE DEATH OF MR. VANSITTART.—On Saturday, Mr. St. Clair Bedford held an inquiry at the Board-room, Mount-street, Grosvenor-square, as to the death of Mr. Vansittart, seventy-five, late of 27, Great Dover-street, Piccadilly, formerly M.P. for Windsor, who died from the effects of a surgical operation performed at his residence. From the evidence of Sir William Gull and other witnesses, it appeared that some time ago the deceased met with an injury to one of his arms, and the wound having remained open, the deceased became exhausted. Sir William Gull was dressing the wound with some lint when the salve with which it was covered suddenly caught fire from the light which it was professionally necessary to use. The deceased's arm was severely burnt, and he ultimately died from shock to the system. The evidence showed that the occurrence was purely accidental, and the jury returned a verdict in accordance with the medical testimony."

Mr. Vansittart had for a long time suffered from paralysis agitans. The atrophy and weakness of the muscles had become extreme, so that from sitting and lying there was an abrasion of the skin over the sacrum. For this Mr. Vansittart was under the care of my friend and colleague, Mr. Durham, who had successfully advised copious pads of cotton-wool. As these were being adjusted by candle-light by the person who usually dressed the wound, the cotton-wool accidentally took fire. Mr. Prescott Hewett was called in immediately after the accident. I did not myself see Mr. Vansittart till the following morning, when he was dying. I was not present at the accident, nor did I attend the inquest.

I am, Sir, your obedient servant,

Brook-street, Grosvenor-square, W. WILLIAM W. GULL.

THE CONJOINT SCHEME.

To the Editor of THE LANCET.

SIR,—Although all the members of the Committee of Reference in relation to the Conjoint Examination Scheme have been appointed, it is not, I hope, too late to offer some remarks on the damaging effects which I cannot but think the scheme is likely to have upon the well-being of the Royal College of Surgeons especially, and scarcely less on that of the profession, whose interests it has so largely promoted.

For more than six years the Council of the College have been more or less co-operating with other English medical Corporations and Universities in the formation of a conjoint examining and diploma-giving board. On the merits of the scheme that has been accepted it may be doubted whether any fifty members of the College outside the Council have made themselves thoroughly informed.

When Mr. Spencer Smith proposed to the Council that they should unite with the Royal College of Physicians and the Society of Apothecaries to form a conjoint examining board, few suspected what the end would be. The original plan consisted in the simple federation of the three medical corporations for the formation of an examining board, without in any way interfering with their separate corporate privileges, excepting that of giving separate registrable qualifications. Each was still to appoint its own examiners; whilst the conduct of the examinations was to be a matter of mutual arrangement. This scheme seemed well calculated to ensure a more uniform, if not a higher, test of fitness for medical practice, and, so far, to answer an urgent demand which the profession had for years made for a "one portal" system. Unfortunately, the Apothecaries' Company was obliged, on account of the terms of its Act, to desist from taking part in the scheme, and the Scotch and Irish Boards declined to participate in it; and so, to a great extent, it fell through.

Fresh efforts were nevertheless made, and this time a new scheme was proposed in which the English universities were to relinquish their individual powers of granting registrable qualifications. Whether the "game was worth the candle" is not quite clear. Whilst the University of Cambridge, in the year 1873, granted 9 registrable qualifications, the University of Oxford 2, and Durham 7, the Royal College of Surgeons granted no less than 391.

As soon as the combining medical authorities (the Society of Apothecaries having obtained their enabling Act) had agreed upon a basis of co-operation, it was somehow found essential to the working of the scheme that a new body should be created, to be called "the Committee of Reference," whose general duties were to be as follows: — "1. To nominate the examiners for appointment by the several co-operating medical authorities. 2. To nominate on each occasion not less than twice the number of examiners to be appointed. 3. To arrange and superintend all matters relating to the examinations, in accordance with regulations approved by the co-operating medical authorities, or the majority of them. 4. To consider such questions in relation to the examinations as they may think fit, or such as shall be referred to them by any of the co-operating medical authorities, and to report their proceedings to all the said authorities." This committee was to be formed of *representatives from the co-operating authorities, of which at first the corporations were to be accredited with twelve out of twenty;* four each to the medical bodies, two each to the universities. Scarcely, however, had this been agreed to, or rather scarcely had the final settlement of the scheme *upon this representative basis* been determined upon, when a demand came from the Senate of the University of London—March, 1876—that on, at all events implied, pain of withdrawal, the representation of the authorities on the "Committee of Reference," as adjusted, should be changed, and that each authority should have an equal number of two representatives. Thus, *the scale was reversed; eight were to be apportioned to the universities, and six only to the medical corporations;* two to each.

The Council of the College of Surgeons might fairly have withdrawn from the scheme at this juncture; but, instead of so doing, they agreed rather to accept even this new and remarkable proposal. As a set-off, however, to this move in favour of the universities, the following proviso was at the same time submitted to the co-operating authorities, but more especially to the medical corporations whom it chiefly concerned:—"That if the first proposal be adopted, 'the appointment of examiners from the list nominated by the Committee of Reference should be left entirely in the hands of the three medical corporations whose diplomas or licences will be obtained by the candidates who shall pass the conjoint examination.'" This act of compromise, however, gave really nothing to the College of Surgeons, for it is clear that the act of nomination is the most imperious and important of the two, especially when as against it there practically is no means of resistance. Moreover, no provision has been made against the admission of laymen to that committee; and such are the conditions on which its President is appointed that, virtually, the appointment is for life.

Forbid it that I should speak disparagingly of the authorities with which the Royal College of Surgeons is thus about to ally itself,, nor would I question honesty of purpose on their part. But in the course of time dissensions may arise in the new governing power—the Committee of Reference; and in that case, how might the College of Surgeons and allied corporations—nay, how might the interests of the profession at large—fare?

For it must not be overlooked as a point on behalf of the medical corporations that they have always been specially concerned with the creation of the working members of our profession; whereas the universities have held the power of granting registrable medical degress as an accidental appendage to their purely educational functions.

Surely the College of Surgeons—and I am now pleading on its behalf—ought to have had a much larger share of influence accorded it in any administrative body to which the most important of its specific duties are to be transferred; enough, indeed, to enable it, at all events, with the aid of its natural allies (if in accord), to hold its own against any opposition or efforts to coerce its action. I have only time to allude to this *one* feature in the new scheme.

After having carefully watched the phases through which the scheme has passed, and seen, as I believe, the cloud, "as big as a man's hand," become ominously enlarged and darkening, I cannot but feel some apprehension for our College, and I have been led to make these observations on the Conjoint Scheme in the hope that the members will take care that its honour, its privileges, and its powers shall not be, as those of other institutions have been, frittered away for the sake of *an idea*.

I am, Sir, your obedient servant,

January 8th, 1878. JOHN GAY.

FEEDING PER RECTUM IN NERVOUS AFFECTIONS.

To the Editor of THE LANCET.

SIR,—In THE LANCET of December 8th last (p. 857) there is a short article well worth attention. It relates to the plan of feeding patients by enemas of meat and pancreas. Not only is that means of great value in cases such as those mentioned in your article (cancer and other organic affections of the œsophagus or stomach), but it ought to be used also in other affections. In one remarkable case, that of a most eminent naturalist, I, in conjunction with an able physician, Dr. Morrill Wyman, of Cambridge (Mass., United States), have made use of it with as much success as could be hoped for. The patient had a violent and persistent spasmodic contraction of the œsophagus, caused by an inflammation of the brain. Finding that it was impossible to force a tube down into the stomach, we resolved to feed the patient by enemas of meat and pancreas. The bowels having been cleansed by an injection of lukewarm water, a part of which was generally kept, a mixture of about two-thirds of a pound of raw beef, with one-fourth or one-third of a pound of pancreas (hog's) was pushed into the rectum by means of a wooden syringe. This operation was repeated twice a day, and the patient was so well fed by that means that he had not visibly lost flesh when he died—after apoplectic symptoms—eight days from the time these enemas had been first used.

In two cases of hysterical spasm of the œsophagus I have employed the same means (in one of them five days, in the other six days), with perfect success. In these last cases the spasm was not absolutely permanent, but any effort to swallow renewed or increased it. In the first, as well as in these last cases, there were well-formed, natural fæcal evacuations.

It is essential that the pancreatic gland which is to be used be from an animal quite recently slaughtered, as the tissue and juice of that gland lose their property very quickly if the temperature of the surrounding air is at all high. It is well to take away the fat and cellular tissue, and inject only the meat and glandular tissue, very finely divided and thoroughly mixed.

I would call the attention of alienists and of superintendents of lunatic asylums to the advantage they would find in employing such a means of feeding, instead of the usual plan of forcing food into the stomach of patients who obstinately refuse to eat. The difficulty of forced alimentation would thus be very much lessened.

Yours very truly,

Jan. 8th, 1878. C. E. BROWN-SÉQUARD.

THE ADMISSION OF WOMEN TO MEDICAL DEGREES.

To the Editor of THE LANCET.

SIR,—I hope you will allow me to direct attention to the kind of examination—as shown by recent papers—which women will have to undergo, in company with young men, in order to gain admission to the medical degrees of the University of London. I ask this in the hope that many of the Arts, Laws, and Science graduates who read THE LANCET may be enlightened upon this particular point.

On turning to the examination-papers for the last half-dozen years, I find, amongst others, the following questions, set by the examiners:—

First M.B., July 30th, 1877.—"Describe the membranous portion of the male urethra, and the structures in *immediate* relation therewith. Mention the chief points of difference in the female subject."

M.S., 1872.—"Describe fully the character of so-called soft and hard chancre, &c."

Second M.B., 1873.—"Give an account of the modes in which syphilis becomes propagated; the details by which the poison is diffused throughout the system, &c."

First M.B., 1873.—"Describe the connexion of the lower four inches of the rectum in the male, the naked-eye character of the coats of the gut for the same distance, &c."

First M.B., 1875.—"Give an account of the genito-urinary organs of the human male."

B.S., 1876.—"Describe in the order of their frequency the several growths which affect the testis, and mention the signs on which you would chiefly rely in the diagnosis of each."

Second M.B., 1875 (Honours).—"What constitutes rape. Mention the lesions which may result from rape (*a*) in the case of adults, and (*b*) in the case of children, pointing out the local affections of the genital organs which may simulate the effects of rape, &c."

Is it surprising that the great majority of the medical graduates view with "detestation" the proposal that women should be admitted to the same degrees as men; the possibility that young women and young men should be subjected to a precisely similar examination, at the same time, and in the same testing-room, upon the topics dealt with in the above quoted questions, and that they should similarly undergo the necessary anatomical and clinical training to fit them for passing such an examination; and, lastly, that women should be encouraged and actively aided to enter the list in honours, in competition with young men at the same table, and, if possible, to carry off the palm for a more intimate acquaintance and superior knowledge upon such subjects as diseases of the testicles, rape, and the like. To my mind the thing is revolting in the extreme, and I believe that when the real facts of the case are known to them, very few non-medical graduates would countenance, *in its present form*, the proposal to admit women to medical degrees in the University.

Yours faithfully,

Harley-street, Jan. 22nd, 1878. TILBURY FOX.

THE MORTALITY OF LYING-IN HOSPITALS.

To the Editor of THE LANCET.

SIR,—I cannot allow the opinion expressed in your journal for January, 19th, 1878, as to the utility of lying-in hospitals, to pass unchallenged. I have had charge of the obstetric wards of the Liverpool Workhouse for several years, and I have no doubt but that these wards are of immense good to the poor people who frequent them. To prove the assumption that lying-in hospitals are to some extent hotbeds of disease, the writer in your pages compares the extra-hospital mortality of puerperal women in London with the intra-hospital mortality of the same kind of women in the same place, and thence infers that a woman who enters one of these institutions for her confinement increases her risk of death sixfold. The figures obtained from the Registrar-General's returns, although numerically not open to the fallacy of "insufficient data" or of "party feeling," are open to the still more serious fallacy that in *maternity hospitals all the deaths, from whatever causes arising*, are recorded as belonging to the puerperal state, whilst in private practice *only those deaths that cannot with any show of reason be ascribed to anything else* are ascribed to the puerperal state. If the Registrar-General could read between the lines of his death certificates, and could calculate the number of cases of pneumonia, bronchitis, peritonitis, &c., that prove fatal in London to women during the first fortnight after labour, he would probably find the remaining five-sixths of the cases necessary to balance the extra- and intra-hospital mortality. We all know the natural dislike that medical men have to avow even to themselves the existence of puerperal fever in their practice, and their still greater dislike to acknowledge it as the cause of death. To show you that lying-in hospitals can equal, and even surpass, in lowness of mortality, extra-hospital practice, I may be allowed to quote the following statistics of this hospital, taken from a paper of mine, prepared for a different purpose some time ago:—During the years 1873—1876, both inclusive, 1208 women were confined, and twelve of these died in some part of the Workhouse Hospital; all the others are, as far as I know, alive at the present moment. Three died of phthisis, fourteen, sixteen, and thirty-six days after delivery. They were all in the last stage of the disease, and from the state of their lungs it was doubtful if they would survive the accomplishment of the births of their children. Two died from heart disease twelve and twenty days after labour. In both the state of the heart was verified by post-mortem examination. One case was admitted with hemiplegia, she died from brain disease, and a premature birth occurred in the agonies of death; one died from pneumonia thirty-four days after labour, and three weeks after she had been sent back to the Lock Hospital; and one died a fortnight after labour from acute rheumatism. The remaining four cases are all that can, with any show of fairness, be ascribed to the evil influence of the hospital, and of these two died from convulsions during labour, one from peritonitis after craniotomy, and one from puerperal fever. Our wards cannot boast of having all the special advantages that would at the present time be considered necessary in a model maternity hospital; the patients who occupy its beds are the least favourable for securing a low rate of mortality, as their constitutions are, in the majority of cases, undermined by drink, disease, and deprivation, and the medical officers do not make any extraordinary efforts to avoid post-mortems, much less other imaginary risks of contagion; yet everyone must acknowledge that these statistics are satisfactory.

I trust to your motto, "*Audi alteram partem*," for the insertion of this letter, as it conclusively proves that maternity hospitals can be conducted without exposing patients to any greater (if as great) risks as in their own homes; and if this is proved, maternity hospitals will then stand in the same position in regard to utility as general hospitals, of the usefulness of which there is not much doubt.

I am, Sir, yours truly,

Liverpool, Jan. 21st, 1878. WILLIAM ALEXANDER.

DRAINAGE OF WOUNDS BY HORSEHAIR.

To the Editor of THE LANCET.

SIR,—Mr. Lister, in THE LANCET of Jan. 5th, calls attention to a letter of mine, with reference to horsehair drainage, published in your journal on Dec. 2nd, 1876. I was not at that time able to do more than speak of it as a probable improvement on the ordinary forms of drainage, although, from my having stated that "hair cannot be surpassed as a suture in wounds where traction is not great, no harm or inconvenience arising even though the sutures be allowed to remain after complete union has been secured," the inference was that much was expected from it.

The question of economy, which was ever before the hospital authorities, on account of antiseptic surgery being then believed to entail a considerable increase in outlay,[1] led to the substitution of hair for the catgut drain, which was then in favour.

Since November, 1876, horsehair has completely supplanted all other forms of drainage for wounds in the General Hospital, and I am now in a position to speak more positively with respect to its merits.

All the advantages mentioned by Professor Lister have been daily noticed, and in this brief letter it is not necessary to recapitulate them. Always at hand and readily prepared, being capable of use again and again in any number of cases, if previously soaked in the strong carbolic solution (1 in 20), no form of drainage can more perfectly give to surgery what is requisite for the relief of tension than this does. Discharges remain unaffected either in consistency or odour, free to escape when formed until the completion of the healing process. These advantages, as compared with caoutchouc tubing, after the use of which fetor is generally present and the discharges creamy, besides the necessity of frequent removal, &c., render the hair far superior in every

[1] The year 1876 was an experimental antiseptic year at the General Hospital, proving in every way a thorough success, giving better surgical results than have hitherto been attained here, judging from published reports and my own personal observation. At the same time the annual expenditure in the Dispensary department has been *in no way increased*. This opinion I know to be contrary to that generally received, and may therefore be of value to hospital authorities who are unwilling to incur the supposed additional outlay. No other dressings than those included in Lister's method have been employed since Jan. 1st, 1876. I may also add that septic diseases are now reduced to a minimum where previously they were but too common. It is, however, but just to add that during the past five years much improvement has taken place in the drainage, ventilation, and general cleanliness of wards and ward offices.

way; the catgut, also failing us when most required, and at no time acting as efficiently, is also inferior.

More than a year's experience of the hair-drain in all classes of surgical cases will, I think, justify me in speaking so decidedly in its favour.

Your obedient servant,

LEWIS W. MARSHALL, M.D.,

Surgeon to Children's Hospital, late Resident Surgeon to the General Hospital, Nottingham.

January 22nd, 1878.

POISONING PER VAGINAM.

To the Editor of THE LANCET.

SIR,—I have thought it worth while to record in the columns of THE LANCET the particulars of a case which occurred to me, now fifteen years ago.

A young married lady, mother of two children, went to London to place herself under the care of an eminent obstetric physician, now some years deceased, for the cure of some uterine complaints, real or imaginary, most probably the latter. On leaving London, she received a prescription for a vaginal injection, which was not used until after she had been a few days at home. The result was an immediate accession of intense pain in the vagina and abdomen, with a copious discharge of thin watery mucus, followed, in the course of a few hours, by swelling of the gums and salivary glands, with profuse ptyalism. Her life was for several days in considerable danger, but she eventually recovered gradually.

The cause of the symptoms was not at first quite obvious, the whole of the injection (4 oz.) having been used, and the prescription not forthcoming. When a copy was obtained next day from London, the cause and course of events became clear. The prescriber, meaning to order calomel and lime-water, had by an unfortunate slip of the pen, written hydrarg. *bichlorid.*, ℈ij., with aq. calcis, ℥iv.

I think cases of vaginal poisoning are by no means common, though I have had the opportunity of knowing that the incautious use of bichloride of mercury externally may prove fatal. On the other hand, Orfila, Beck, and others relate cases of fatal poisoning by arsenic feloniously introduced into the vagina. In any case the rapidity with which absorption takes place from that mucous surface is well worthy of notice, and is calculated to inspire caution in the use of potent agents through that channel.

I am, Sir, yours faithfully,

Bath, Jan. 6th, 1878. R. T. GORE.

COLONIAL MEDICAL DEGREES.

To the Editor of THE LANCET.

SIR,—In THE LANCET of June 2nd, page 815, it is stated, "the Colonies re-examine men holding British qualifications before they are admitted to practice in those outlying provinces," &c.

I beg to state this is not the case here, nor do I know of any colony in which such re-examinations are practised. Medical men arriving in this colony are simply required to submit their testimonials for registration, and afford such proof as may be possible of their identity with the individuals named in the document.

May I take this opportunity of inquiring if registration, as lately agreed to by the General Medical Council, confers on holders of colonial degrees or diplomas any substantial benefit, such, for instance, as the right to practise in Great Britain, or in the empire generally? I ask this because in the Royal Letters Patent, issued to the Melbourne University, March 14th, 1859 (the University having been incorporated about six years previously), I read as follows:—"We ..... do by virtue of our Prerogative Royal, and of our especial grace and certain knowledge, and mere motion by these presents, for us, our heirs and successors, will, grant, and declare that the degrees of Bachelor of Arts, Master of Arts, Bachelor of Medicine, Doctor of Medicine, Bachelor of Laws, Doctor of Laws, Bachelor of Music, and Doctor of Music, already granted or conferred, or hereafter to be granted or conferred, by the said University of Melbourne, shall be recognised as academic distinctions and rewards of merit, and be entitled to rank, precedence, and consideration in our United Kingdom, and in our Colonies and possessions throughout the world, as fully as if the said degrees had been granted by any University in our said United Kingdom," &c.

The words, "as fully," indicate, I think, the perfect equality in all professional rights of the Melbourne with the British graduates, and, of all rights, that of practising their profession throughout the empire generally is the most important and valuable.

I remain, Sir, yours obediently,

J. W. AGNEW, M.D.,

Hon. Sec., Court of Medical Examiners.

Hobart Town, Tasmania, Nov. 9th, 1877.

*** We the more readily insert our correspondent's letter, as undoubtedly he is right as to the colonies not re-examining those who hold British qualifications. The Medical Act empowers such persons to practise in all parts of Her Majesty's dominions. An amending Act, in 1868, gave colonial Legislatures the power to make laws enforcing *registration*, within their respective jurisdictions, of persons registered under the Medical Act. It provided, however, that persons already registered under the Medical Acts should be entitled to be registered under the Colonial Act on simple payment of fees. By some inadvertence we represented the colonies as re-examining the holders of British qualifications. Holders of colonial degrees are not at present entitled to practise in England. In any amendment of the Medical Act it is probable that the holders of the best colonial degrees will be recognised.—ED. L.

TREES IN TOWNS.

To the Editor of THE LANCET.

SIR,—In a recent number of your journal you allude to the fact that persistent efforts are being made to plant trees in streets wherever practicable. You are apparently much in favour of this movement, and state that the hygienic value of trees in towns must be great. I have always been of opinion that the freer and more unobstructed the avenues for fresh air, nature's grand deodorizer, are the better; especially in towns, where there is a dense population and vile scents and odours, fresh air is most needed, and the stopping up of the free thoroughfare by dense and dark foliage will be most pernicious. It will prevent the foul air being swept away and our close neighbourhoods purified, while by personal and practical experience I know that disease is increased by close humid atmospheres. If you will kindly point out in an early number where I am in error I shall be obliged, otherwise I do hope that you will, as a faithful guardian of the public health, do what you can to prevent anything which will, if I am correct, be so hurtful to our populations.

I can, I hope, appreciate beauty in nature, and am glad that now by means of parks it is happily within reach of all of us; I only protest against a deadly development of modern ideas of beauty.

I am, Sir, your obedient servant,

Westminster, Jan. 22nd, 1878. WILLIAM C. STREET.

ARSENICAL WALL-PAPERS.

To the Editor of THE LANCET.

SIR,—Permit me to call attention once more in your columns to this subject. I need not say a single word as to the danger of such poisonous ornaments, for you have often done that, but I wish to point out that the bright greens are not the only tints to be avoided. Any papers which contain a sea-green pattern, or even an opal white ground, may, according to the present custom of paper stainers, be so heavily coloured with arsenic as to be dangerous.

I have just analysed every sample of paper from a ten-roomed house, and although no single paper could, by any stretch of imagination, be called green, *two* samples are badly arsenical, and *three* more contain some arsenic—five bad samples from ten rooms.

It seems to me that colouring paper with poisonous colours should be made a criminal offence. The harm inflicted is worse because, in many cases, the source is unsuspected.

Yours truly,

G. J. WIGNER, F.C.S.

Laboratory, Great Tower-street, Jan. 17th, 1878.

DRILL AT SCHOOLS.

To the Editor of THE LANCET.

SIR,—The conscription would probably be very objectionable in this country. A year or two or more taken from a young man's life at eighteen or nineteen might seriously diminish his chances in life, but now that education is compulsory, why should not military drill, including rifle instruction, constitute part of such education, and be compulsory in all schools? An hour's drill in all schools, five or six days in the week, would probably in most cases do the boys good. Parliament is now sitting, and it might be made compulsory in a very short time. How easily and how thoroughly a thing is acquired if taught sufficiently early in life. It might be begun with boys at all schools, say at the ages of eight or ten, and imagine what drilled soldiers these would be if drilled steadily on till the ages of eighteen or nineteen. Other boys, leaving school earlier, would still in most cases know their drill well if begun at eight or ten. What shots we might develop. In a few years, say eight or ten, the whole manhood of the nation would be drilled soldiers. Even beginning now, boys with two or three years to remain at school would in a few years constitute a considerable body of drilled youths.

I remain, Sir, yours, &c.,

Jan. 21st, 1878. D. R.

PARLIAMENTARY PROCEEDINGS.

HOUSE OF LORDS.

Friday, January 18th.

INTEMPERANCE.

ON the motion of the Earl of CORK, in the absence of the Duke of Westminster, the Select Committee appointed last session to inquire into the prevalence of habits of intemperance, and into the manner in which those habits have been affected by recent legislation and other causes, was reappointed.

HOUSE OF COMMONS.

Monday, January 21st.

SMALL-POX IN THE ISLE OF MAN.

SIR JAMES LAWRENCE gave notice that on Monday next he would ask the Home Secretary whether information had reached him of an outbreak of small-pox in the Isle of Man, whether the Governor of the island and his family had left it in consequence of the virulence of the disease, whether it was not true that the Vaccination laws were not in force in the island, and whether any steps were being taken to extend the operation of those laws to it.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen, having passed the required examination for the diploma, were duly admitted Members of the College at a meeting of the Court of Examiners on the 21st, 22nd, and 23rd inst.:—

Allinson, H. Calthorp, L.S.A., King's Lynn.
Ayres, A. R. Aston, Brighton.
Bailey, R. Greenoak, Leeds.
Beale, E. Clifford, Dolgelly.
Blackmore, Alfred, L.S.A., Manchester.
Blake, W. Farewell, L.R.C.P. Lond., Grafton-street East.
Brown, W. Henry, Leeds.
Brumwell, Ernest, L.S.A., Kendal.
Burd, G. Vanhouse, Okehampton.
Burry, H. B. Pullen, Worthing.
Coates, George, Oxford.
Culhane, F. W. Slater, Brockley.
Deare, E. Walter, Malpas-road.
Ellison, F. William, L.S.A., Leytonstone.
Evans, T. Charles, Ealing, Middlesex.
Fairland, S. Thomas, Chelsea.
Gamble, E. L. Gomperts, L.S.A., Grantham.
Gaze, W. Henry, L.S.A., Thames Ditton.
Gofton, J. Edward, North Shields.
Graham, C. Robert, Wigan, Lancashire.
Green, Charles, Eston, Durham.
Hinings, J. William, L.R.C.P. Edin., Pudsey, near Leeds.
Keen, Edward, King's-road, Chelsea.
Lambert, John Speare, L.S.A., Exeter.
Landon, A. Jermyn, L.S.A., Margaret-street.
Latham, William, L.K.Q.C.P. Irel., Ashton-in-Mackerfield.
Lawson, R. Lockhart, L.S.A., Dublin.
Le Cronier, Hardwick, Jersey.
M'Geagh, T. E. Foster, L.S.A., Tunbridge Wells.
Moore, G. Richmond, Hartlepool.
Murray, C. Herbert, M.D. M'Gill Coll., Richmond, Ireland.
Muskett, J. Herbert, Stoke Newington.
Newington, Theodore, Ticehurst, Sussex.
O'Connor, James, Cavan Town.
Pointon, James, L.R.C.P. Lond., Birkenhead.
Pollard, E. R. Hugh, L.K.Q.C.P. Irel., Oxford-terrace.
Price, Arthur, L.S.A., Croydon.
Reynolds, L. William, L.S.A., Exeter.
Robertson, F. F. Leslie, M.B. Aberd., Cosham, Hants.
Revell, R. Carter, L.S.A., Saltash, Cornwall.
Salter, J. Reynolds, Taunton, Somerset.
Scallon, E. Oliver, L.S.A., St. Martin's-lane.
Sheppard, John, Newark, Notts.
Silcock, A. Quarry, Dalston.
Smith, A. Lapthorn, M.D. Laval, Montreal, Canada.
Sykes, J. F. Joseph, L.R.C.P. Lond., Fitzroy-square.
Thomas, D. Edward, L.S.A., Cwmamman.
Trewman, G. Turner, L.S.A., Llanelly, South Wales.
White, O. Mark, L.S.A., Blenheim-road.
Woolley, S. Poole, M.B. Glasg., Wood-green.
Zimmermann, B. Frazier, Lauderdale-road.

[In last week's list of gentlemen who passed the First College on the 15th inst., for the name "Hayward" read "Haward." In the same list, "Westminster Hospital" should have followed the name of J. G. Harries, not "Charing-cross"; and the name of H. J. Sequeira should have had "London Hospital" only attached to it.]

The annual course of lectures at the Royal College of Surgeons will be commenced on Monday next, at 4 o'clock P.M., by Professor Erasmus Wilson, F.R.S., who will deliver six lectures on "Dermatology."

APOTHECARIES' HALL.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on Jan. 17th:—

Deakin, James, Sale, Manchester.
Lambert, John Speare, St. Leonard's-crescent, Manchester.
Pearce, John Puckey, Biscovey, Par, Cornwall.
Thomas, David Edward, Cwmamman, Carmarthenshire.

DOCTORS' CHARGES.—Their patients.—*Punch.*

DR. G. S. CARDEW has been placed on the Commission of the Peace for Bath.

THE rural medical officers of the North Dublin Union have received an addition of £25 yearly to each of their salaries.

MR. SIDNEY HARVEY, the Public Analyst for Canterbury, reported to the Town Council at their last meeting that "no samples had been handed in to him to analyse during the past quarter."

AT the last meeting of the Aylesbury Local Board of Health it was unanimously resolved:—"That the Board are perfectly satisfied with the manner in which the sewage of the district has been treated by the Native Guano Company."

ONE of the Guardians of the Gainsborough Union, at the last meeting, drew attention to the consumption of spirituous liquors by the paupers, and the following resolution was passed:—"That the medical officers of the union be requested to exercise as much caution as possible in the prescribing of intoxicating liquors." An amendment to the effect that the Board should not interfere with the medical men at all was moved, but negatived.

A CENTENARIAN.—A woman named Tyrrell died in the Ennistymon Workhouse Hospital last week at the advanced age of 102 years, retaining, it is said, all her faculties to the last.

VACCINATION GRANTS.—The following gentlemen have received the Government grant for the successful performance of vaccination in their respective districts:—Mr. J. W. Harrison, Cemetery-road, Sheffield, £100 12*s.*; Mr. W. L. Thomas, medical officer of the No. 6 district of the Horsham Union, £4 6*s.* (fourth time); Mr. Alfred Kebbell, Flaxton, £2.

BEQUESTS, &C., TO MEDICAL CHARITIES.—The Royal Free Hospital has received £922 17*s.* 3*d.*, the Metropolitan Convalescent Institution, £922 17*s.* 3*d.*, and the Earlswood Asylum for Idiots £461 8*s.* 8*d.*, under the will of Mr. William Thomas, of Bolton. The Duke of Northumberland has subscribed one thousand guineas towards the Endowment Fund of the Invalids Home Association, provided the £20,000 required is subscribed by the 1st of January next. Mr. A. Torkington has given £100 to the Evelina Hospital for Sick Children.

ASSOCIATION OF SURGEONS PRACTISING DENTAL SURGERY.—The annual general meeting of this Association for the election of officers for the year 1878, was held at their rooms, in Chandos-street, on Wednesday evening, January 16th. The following is the list of the newly-elected officers of the Association:—President: Mr. S. J. A. Salter. Vice-Presidents: Mr. W. A. N. Cattlin, Mr. Samuel Cartwright. Treasurer: Mr. Alfred Coleman. Hon. Sec.: Mr. J. Hamilton Craigie. Council: Messrs. Hamilton Cartwright, T. Edgelow, F. Fox, J. Fairbank, G. Gregson, W. D. Napier, J. H. Parkinson, and N. Stevenson.

THE NORTH-WESTERN AND THE YORKSHIRE ASSOCIATIONS OF MEDICAL OFFICERS OF HEALTH.—A joint meeting of the above Associations will be held at the Rochdale Town Hall, on February 1st, for the discussion of the following subjects:—"The Rochdale system of dealing with excreta and house refuse," to be introduced by Dr. Wilson, M.O.H.; "The influence of the birth-rate upon the death-rate of a district," to be introduced by Dr. Britton (Halifax); "Suggestions for the amendment of the 'Public Health Act, 1875,'" to be introduced by Dr. Sutton (Oldham).

HEALTH OF DUBLIN.—During the December quarter the births registered in Dublin amounted to 2201, or at the rate of 28 in every 1000 of the population; and the deaths to 2192, or 27·9 per 1000. Zymotic diseases caused 430 deaths, the mortality from the seven principal diseases of this class representing an annual death-rate of 4·1 per 1000 inhabitants. Measles was very prevalent, the deaths from this disease and its complications being more than one-third of the mortality from all zymotic diseases. The principal causes of death were as follows:—Bronchitis produced 363 deaths; phthisis, 217; convulsions, 173; measles, 147; heart disease, 100; pneumonia, 89; fever, 56; cancer, 50; hydrocephalus, 50; croup, 38; mesenteric disease, 38; apoplexy, 36; whooping-cough, 35; scarlatina, 33; diarrhœa, 32; small-pox, 10; whilst 55 deaths were accidental, 6 homicidal, and 5 suicidal. Among the deaths registered, three were returned as aged respectively 100, 105, and 110 years.

Medical Appointments.

ALEXANDER, W., M.D., has been appointed a Certifying Factory Surgeon for Halifax, vice Bramley, resigned.

ALLEN, R. G., L.R.C.P.Ed., M.R.C.S.E., has been reappointed Public Vaccinator for the Belper District of the Belper Union for three years.

BARR, J., M.B., L.R.C.S.Ed., has been appointed Assistant-Physician to Stanley Hospital, Liverpool.

BENSON, A. H., M.B., L.R.C.S.I., & L.M., has been appointed Assistant- and House-Surgeon to St. Mark's Ophthalmic Hospital and Dispensary, Dublin, vice Story, appointed Junior Surgeon.

BRASH, E. A., L.R.C.P.L., M.R.C.S.E., has been appointed a Surgeon to the Exeter Dispensary, vice Phelps, resigned.

CALLENDER, J., M.B., C.M., has been appointed Medical Officer and Public Vaccinator for the No. 3A, or Heathfield, District of the Hailsham Union, Sussex, vice Hackney, resigned, at £60 per annum and fees.

DODSWORTH, F. C., L.R.C.P.L., M.R.C.S.E., & L.M., has been appointed Medical Officer of Health for the Chiswick Urban Sanitary District, vice Moore, resigned, at £30 per annum.

DONALDSON, W., L.K.Q.C.P.I. & L.M., L.R.C.S.I., has been appointed Medical Officer and Public Vaccinator for the Llanidloes District of the Newtown and Llanidloes Union, Montgomeryshire, vice Davies, deceased.

DRINKWATER, H., M.B., C.M., M.R.C.S., has been appointed Medical Officer and Public Vaccinator for the Bishopwearmouth West District of the Sunderland Union, vice Shaw, deceased. Also Medical Referee to the Wesleyan and General Insurance Company, and Medical Officer to the Sunderland Corporation Sick Fund.

DUKE, Dr. A., has been appointed Assistant-Physician to the Rotundo Lying-in Hospital, Dublin, vice Hart, resigned.

DUMBLETON, E. H., M.R.C.S.E., has been appointed Assistant House-Surgeon to the Metropolitan Free Hospital, vice Clowes, whose appointment has expired.

GOULDER, F. S., L.R.C.P.L., M.R.C.S.E., has been appointed Resident Medical Officer to the Guest Hospital, Dudley, vice Orwin, resigned, at £120 per annum, apartments, &c.

HACON, W. E., L.R.C.P.L., M.R.C.S.E., L.S.A.L., has been appointed Assistant Medical Officer to the Central London Sick Asylum District Asylum, Highgate, vice Benton, resigned, at £100 per annum, board, and residence.

HARVEY, C. W., M.B., has been appointed Second Assistant Medical Officer to the County Lunatic Asylum, Brentwood, Essex, vice Burtonshaw, resigned.

HOWIE, T. B., M.B., C.M., has been appointed Medical Officer of Health for the Burgh of Alyth, Perthshire.

JOHNSON, T., L.R.C.P.Ed., M.R.C.S.E., has been appointed Medical Officer for the Sedgley No. 2 District of the Dudley Union, vice Smith, deceased.

MONTGOMERY, J. W., F.C.S., has been appointed Public Analyst for the County of Cumberland, at 21s. per analysis for the first hundred, 10s. 6d. per analysis for the second hundred, and 6s. per analysis beyond, per annum; £2 12s. 6d. for each quarterly report, 21s. for compulsory attendance, 3d. per mile each way for travelling expenses, and 21s. per analysis of water.

NICHOLLS, L., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer and Public Vaccinator for the No. 1 District of the Sudbury Union, Suffolk, vice McCreery, deceased.

OSBORNE, J. H., M.R.C.S.E., L.S.A.L., has been appointed House-Surgeon to the Nottingham Dispensary, vice White, resigned.

PATERSON, R. H., L.R.C.P.Ed., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer of Health for the Gainsborough Rural Sanitary District, vice Sutton, whose appointment has expired, at £50 for one year.

POWELL, L. L., L.R.C.P.Ed., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer and Public Vaccinator for the Asfordby District of the Melton-Mowbray Union, at £23 per annum and fees, vice Whitchurch, deceased.

PRIDEAUX, T. E. P., L.R.C.P.I., M.R.C.S.E., L.S.A.L., has been appointed Assistant Medical Officer to The Friends' Retreat Lunatic Asylum, York, vice Fausset, resigned, at £150 per annum, board, lodging, &c.

ROBERTS, T. L., M.R.C.S.E., has been appointed Public Vaccinator for the Alfreton District of the Belper Union, vice Siddall, resigned.

STOWERS, J. H., M.D., has been appointed Physician to the St. John's Hospital for Diseases of the Skin, Leicester-square.

TURNER, H., M.R.C.S.E., L.S.A.L., has been appointed Medical Superintendent of the Bethel Hospital for the Insane, Norwich, vice Mercier, resigned.

WILLAN, G. T., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer to the Melton-Mowbray Union Workhouse, at £40 per annum; and Medical Officer and Public Vaccinator for the Melton-Mowbray No. 2 District, at £30 per annum and fees, both vice Whitchurch, deceased.

WRIGHT, J. H., M.R.C.S.E. & L.M., L.S.A.L., has been appointed a Certifying Factory Surgeon for Halifax, vice Bramley, resigned.

Births, Marriages, and Deaths.

BIRTHS.

CONSTABLE.—On the 16th inst., at Lambeth-road, the wife of Joseph J. C. Constable, M.D., of a daughter.

FOX.—On the 22nd inst., at Clarence-street, Victoria-park, Manchester, the wife of Dacre Fox, F.R.C.S.E., of a son.

GAIRDNER.—On the 20th inst., at the College, Glasgow, the wife of Professor Gairdner, M.D., of a son.

HARVEY.—On the 21st inst., at South Petherton, the wife of Walter Anstice Harvey, M.B., of a son.

KING.—On the 18th inst., at Ambleside, Westmoreland, the wife of William Moore King, M.R.C.S., of a daughter.

LIVINGSTONE.—On the 19th inst., at Mansfield-place, the wife of William Oswell Livingstone, M.B., of a daughter.

MORTON.—On the 15th inst., at Veytaux, Switzerland, the wife of G. E. Morton, Surgeon-General, Indian Service, retired, of a daughter.

OGILVIE.—On the 18th inst., at Bolton, the wife of James Ogilvie, M.B., of a daughter.

SMITH.—On the 19th inst., at Springburn, Glasgow, the wife of James Allan Smith, M.D., of a son.

SOMMERVILLE.—On the 24th ult., at Beawr, Rajpootana, the wife of Dr. James Sommerville, Medical Missionary, of a daughter.

THOMSON.—On the 19th inst., at Westgate, Peterborough, the wife of W. Thomson, M.D., of a son.

MARRIAGES.

ANDERSON—ANGELL.—On the 17th inst., at St. George's, Hanover-square, Joseph William Townsend Anderson, L.R.C.P.Ed., to Katherine Eugenie, daughter of T. J. Angell, Esq.

SYKES—STAINS.—On the 16th inst., at Marylebone Church, William Sykes, M.R.C.S.E., to Kate, daughter of the late Richard Stains, Esq.

DEATHS.

ALLWOOD.—On the 5th November, John Philip Allwood, L.R.C.P.I., M.R.C.S.E., L.S.A., Surgeon on board the ss. *Northumberland*, on her voyage to Melbourne, aged 33.

BLENNERHASSETT.—On the 14th inst., at Coolaney, co. Sligo, Rowland Blennerhassett, M.D.

CRAWFORD.—On the 25th November, at Lewisburgh, Richmond, Jamaica, Dr. Hugh Crawford, aged 77.

CROSWELL.—On the 19th inst., at Llandboidy, Carmarthenshire, Charles Lewis Croswell, L.S.A.L., aged 67.

DAVIES.—On the 16th inst., at the Wilton Hospital, Salford, Francis Thomas Davies, L.R.C.P.Ed., aged 28.

EDWARDS.—On the 18th inst., at 88, Lawrence-road, Notting-hill, David Owen Edwards, M.R.C.P.L., aged 77.

HALL.—On the 14th inst., at Richmond-road, Hackney, William Hall, F.R.C.S.E., aged 79.

HENDERSON.—On the 14th inst., at Westoe, Thomas Henderson, Surgeon, aged 42.

HOLLAND.—On the 16th ult., at Great Grimsby, George Holland, M.R.C.S.E., aged 55.

SIMPSON.—On the 17th inst., at Leiston, Suffolk, James Simpson, L.F.P.S.G., L.S.A.L., aged 49.

TRIBE.—On the 16th inst., at Paris, E. S. Tribe, M.R.C.S.E., Surgeon-General, Indian Service, aged 61.

WALLACE.—On the 21st inst., at Cardiff, Samuel Wallace, M.D., aged 51.

[N.B.—*A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.*]

Notes, Short Comments, and Answers to Correspondents.

PRESERVED VEGETABLES.

THE influence of desiccation on vegetable substances, and the extent to which preserved vegetables differ from fresh vegetables, if indeed they differ at all or in any important degree, are matters of much interest to the druggist and medical practitioner, who frequently use dried herbs and dried parts of plants, and to the general public, who largely use preserved vegetable foods. A few months ago, by request of the Chairman of the Admiralty Committee appointed to consider the causes of the outbreak of scurvy in the recent Arctic Expedition, Dr. Attfield, Professor of Practical Chemistry to the Pharmaceutical Society of Great Britain, analysed samples of vegetables taken from the residual stores of the *Alert* and *Discovery*, on the return of those ships to England. The results of the analyses and general examination he states shortly as follows:—The preserved carrots and potatoes were of good quality. The preserved cabbage was deficient in saline constituents. The specimen of preserved mixed vegetables was probably somewhat deficient in saline substances. Whether or not these conclusions may be applied to the similar preserved vegetables supplied to the public generally cannot, he says, be definitely decided until more analyses have been published. From the examinations now described, however, and from general physical examinations of many other samples of preserved vegetables made since these experiments were completed, it is evident that, in the not unimportant matters of colour and general appearance, preserved vegetables can be sent to table in a condition very closely resembling the fresh articles. Properly soaked, dried vegetables also reabsorb almost their normal proportions of water, and become normally tender and juicy. In drying cabbage, it would be better to cut out and exclude stalks and thick midribs altogether, rather than so to press them as to risk loss of juice and retention of mere fibre; for the saline substances in the juice are, physiologically, probably amongst the most important of the constituents. The portion of cabbage taken at a meal would obviously do its work in the system more thoroughly if containing the full proportion of all constituents than if deprived of half of them. As regards flavour and odour, it is a question whether the very fugitive substances on which they depend can be retained, entirely, during either desiccation or any heating or steaming process; at the same time, except perhaps in the case of fruits of very delicate flavour, the taste and aroma remaining in the preserved article will probably fully satisfy the nose and palate of those who really desire such vegetable food and are unable to obtain it in the fresh condition. Preserved vegetable substances, roots, fruits, or what not, are already largely used by the public. Professor Attfield is of opinion that, on the whole, they well deserve the confidence placed in them.

An Old Subscriber.—We do not know anything of the article in question.

HYDROPHOBIA.

To the Editor of THE LANCET.

SIR,—I feel confident no member of our profession will agree with Colonel Berkeley that the case I related in THE LANCET of Oct. 20th, 1877, was *not* hydrophobia. The symptoms speak for themselves, and require no further explanation from me. As to the particular symptom of "thirst" alluded to, anyone conversant with the literature of hydrophobia will know that this is a symptom often observed in this disease; and if Colonel Berkeley will borrow from his local physician either Sir Thomas Watson's work on Medicine, or the recent work on Surgery by Mr. Holmes, he will be able to satisfy himself on this point.

I am deeply grateful for being informed of the meaning of the word "hydrophobia." Perhaps in his next communication Colonel Berkeley will enlighten the medical world with regard to a few more medical terms.

Although in my case there was "no fear of water or any liquids *quo* liquids," there was a terrible dread of liquids when they were brought to the patient to drink, and the mere notion of swallowing them was sufficient to set up one of those frightful suffocating spasms which, as far as I am aware, is never similarly produced in any other disease. If your correspondent will carefully look at my case again, he will observe that one of the earliest symptoms recorded is the difficulty in swallowing milk. But there was as much dread of solids as liquids when given to him to make use of, and I cannot help thinking this would be observed in a large number of cases if the patient were put to the test. The term "hydrophobia" has misled Colonel Berkeley, and it certainly is an objectionable name for this disease, as it only partially and imperfectly expresses one of its characteristic symptoms. Another name, expressing a "fear of swallowing," would, I am sure, be far more correct and suitable. But it would be useless to propose such a name, seeing the historical character of the present name.

Yours obediently,

Ashburton, Devon, Jan. 1878. JAMES ADAMS.

Mr. Arthur Browne.—The only trustworthy information to be got regarding the appointments referred to by our correspondent is to be obtained of the Secretaries of the several Societies. See the advertisements in *The Times*.

Dr. Lyster's cases shall appear soon.

SANITARY CONDITION OF VILLAGE SCHOOLS.

IN his Annual Report on the Sanitary Condition of the Southern Rural District, Dr. George Wilson, medical officer of health for the North Warwickshire Combined Districts, observes that in the course of his inspection he inquired very carefully into the condition of the outside offices attached to the different village schools, and found that the instances in which proper closet accommodation had been provided were few and far between. In the majority of them the foul deep cesspit, emptied only at rare intervals, constitutes the receptacle for the excreta. Dr. Wilson strongly condemns these privies, it being within his experience that they are frequently productive of diarrhœa and of more serious disorders among the pupils. In the absence of properly constructed and arranged watercloseta, the provision of some form of dry closet, fitted with boxes or pails, is recommended. By using dry earth or ashes such closets can be kept entirely free from offensiveness. Schools, it is urged, should be made nurseries of cleanliness and health as well as of learning. Dr. Wilson also finds fault with the interior arrangements of many of the village schools, the lighting, ventilation, warming, &c., being very imperfect.

Fog and *A Subscriber* are referred to Sir William Gull's letter in another column.

THE SOUNDS OF THE HEART.

To the Editor of THE LANCET.

SIR,—I regret that Mr. Illingworth has compelled me to answer his letter, which appeared in your last number. My former letter was dictated by the hope that he would have reconsidered his suggestion—advanced as it was without one single proof to support it, or argument to recommend it,—specially with regard to the sequential phenomena of the cardiac cycle. My letter was from a clinical standpoint; but, as Mr. Illingworth throws some doubt upon the likelihood of my being able to appreciate physiological facts, in this last communication upon the sounds of the heart with which I shall trouble you, it may be well to remind him of a few data given by physiology.

The first sound is regarded as lasting from one-fourth to one-third of the entire revolution, we may say two-fifths. The ventricular systole extends to four-tenths of the cycle, or two-fifths also. The one then is as long as the other. But for the sake of greater accuracy the observations of Landois are better. According to him the period of ventricular contraction during which the walls are approaching one another is ·192 second; this is followed by the period of contraction, continuing after the heart has altered its form, which lasts ·082 second; and then there is a short period, the beginning of ventricular diastole, until the semilunar valves close, this period being ·072 second. The whole ventricular systole, therefore, is ·346 second long, but of this only ·192 is occupied by the ejection of blood.

Now, says Mr. Illingworth, the first sound is caused by the meeting of the ventricular walls. Therefore it must follow the ejection of blood. But this occupies ·192 second. Therefore the first sound cannot be heard during that period. But we have seen that it is as long as the ventricular systole—i. e., at least ·192, if not ·274 or ·346 second long. Therefore beginning at the end of this period of ·192 second, and lasting as long, it is longer than the remaining period between its termination and the closure of the semilunar valves (·082 + ·072 = ·154 second), and therefore it must partly coincide with the second sound, which is absurd. The first sound then cannot be due to the meeting of the ventricular walls. Q. E. D.

And I must reiterate what I said before, that if the first sound were caused by the meeting of the walls, the *percussion-wave* in the carotid, or even in the radial artery, must precede the first sound, and this it never does.

I am, Sir, faithfully yours,

University of Edinburgh, Jan. 22nd, 1878. GEO. A. GIBSON, D.Sc.

To the Editor of THE LANCET.

SIR,—Mr. Illingworth's theory as to the mechanism of the first sound of the heart was put forward and considered untenable so long ago as 1835. In that year a report on the motions and sounds of the heart was read before the British Association, and one of the conclusions arrived at by the Dublin Sub-committee appointed to investigate the subject reads thus: "That it (the first sound) is not produced by the friction of the internal surfaces of the ventricles against each other, as such friction cannot exist until the blood has been expelled from the ventricles, whereas the first sound commences with the beginning of the ventricular systole." (Fifth Report of British Association, p. 249.) The same theory was negatived in the following year by an English Sub-committee.

Although Mr. Illingworth attempts to explain those cases in which a systolic murmur occurs without any first sound in accordance with his theory, he would find it difficult to account for other cases, perhaps more numerous, in which the first sound is accompanied by a blowing systolic murmur; this murmur, being due to mitral regurgitation, should always precede a sound caused by contact of the ventricular walls, and an auscultator would hear a bellows murmur running up to, and terminating with, the first sound; in other words, a soft presystolic murmur—an anomaly which, I venture to say, no one has ever listened to.

I am, Sir, yours faithfully,

Isle of Raasay, Skye, Jan. 13th, 1878. C. E. H. WARREN, M.B.

THE COLLEGE OF SURGEONS AND "DENTISTS."

To the Editor of THE LANCET.

SIR,—It may be a matter of interest to Mr. Hancock and the six supporters of the resolution which he proposed to the Council of the College of Surgeons on the 10th inst., that in a village in Cambridgeshire there lives a woman of the labouring class who has for many years practised "tooth-drawing," and in another a blacksmith who performs the same operation when requested. Shall we have the pleasure of seeing these two worthies on the Register of 1879? Yours faithfully,

Jan 21st, 1878. J. S. G.

THE ARMY MEDICAL DEPARTMENT.

THE *Indian Medical Gazette*, a periodical written by and for army surgeons, has a decided right to expound the feelings of the department on a question which so closely concerns, not it alone, but the efficiency of the British army, and our contemporary's opinion deserves every consideration. In the issue of the *Gazette* for December 1st last, it sketches what it considers to be the reforms or changes necessary to restore the popularity of the service, as follows:—"Restore long service, and reduce the pay on entering to the old rate of 10s. a day; restore forage as an appanage of rank to all field officers who entered prior to the Warrant of 1873; place medical officers on the same footing as other officers for leave and sick leave; fix the rate of allowances absolutely, and do not allow them to depend on the interpretation of paymasters and commissariat officers; let each corps have its gazetted medical officers; give a distinct staff uniform instead of the present staff regimental abortion; and, above all, let medical officers be assured that their rights shall be held as inviolate as those of the other officers of the army." Given these concessions, our contemporary says, the Government would soon have a plethora of candidates.

C. H. P. will find an obituary notice of the *Medico-Chirurgical Review* in THE LANCET of October 13th last year.

EXTIRPATION OF THE LARYNX.

To the Editor of THE LANCET.

SIR,—The interesting case recorded in your report of the meeting of the Medical Society of London brings before English surgeons the question of the future of excision of the larynx in a manner which must arrest their attention, as well as that of physicians who occupy themselves with laryngeal diseases.

Not having been able to be present at the meeting, but having since then enjoyed the opportunity of examining the patient, I should be glad to be allowed, through your columns, to add to the testimony of those speakers who advocated the operation my approval of the course taken by Dr. Foulis, and my congratulations on his success.

Since Billroth's first case—I may say since Czerny's experiments on animals—I have watched with keen interest the history of this operation, and as each fresh case of cancer of the larynx comes under my notice, the question of excision presents itself as one that may have to be decided. There are no doubt many patients who, with fair prospects of survival, would refuse to undergo such an operation. On the other hand, some would be glad to have life prolonged under the disadvantages imposed by an artificial vocal apparatus; while others—perhaps more numerous—would rejoice to embrace even a desperate operation which held out, at least, the prospect of a period of relief from their most urgent sufferings. It becomes, then, an important question whether the measure of success already attained does not justify further efforts in the same direction. I had reached the opinion that it does, from a study of the continental cases, and this first case in our own country tends to confirm the conclusion. It is, however, of the highest importance that such an operation should only be performed in suitable cases, and it is to be hoped that the future of excision may not be imperilled by a rash resort to it when less radical measures would suffice.

Dr. Foulis's case, like Bottini's, was one of sarcoma. It was a spindle-celled, recurrent growth, which had returned for the third time. Thyrotomy had been proved of only temporary value; and Sir James Paget's experience of such growths is that they will recur unless the organ containing them be removed, but if this be done that they may not return. So far, therefore, the prospect is encouraging for Dr. Foulis's patient.

In primary cancer of the larynx, it is true that the progress of the disease is often slower than in many other parts, but that progress is none the less surely towards a fatal termination; and though tracheotomy may delay the event, it cannot arrest the disease. Professor Schroetter has reported more than one case in which complete removal of a cancerous growth from the larynx has not been followed by its return; but I am not aware of their subsequent history, and such a result, to say the least, is excessively rare. Possibly the discussion now raised may lead to further information.

Lastly, there are cases of stenosis in which extirpation has been entertained, and indeed performed. In these it appears to me probable that partial removal may perhaps suffice—that *resection* may take the place of *exsection*. In December, 1874, Professor Heine resected the lateral portions of the thyroid and cricoid cartilages on account of syphilitic stenosis. The result was favourable; but a year afterwards the patient died of lung disease, combined with a fresh outbreak of syphilis in the larynx and pharynx. This would be equally likely to happen after exsection, and therefore perhaps sub-perichondrial resection has the first claim on our consideration in similar cases.

I am, Sir, your obedient servant,
Dean-street, Park-lane, Jan. 21st, 1878. PROSSER JAMES.

To the Editor of THE LANCET.

SIR,—It could not be reasonably expected that, with the great pressure on your space, you should be able to give *verbatim* reports of the remarks of all speakers at the Societies. I would not ask you to make an exception in my case from simply personal motives; but in view of the great importance of the subject, and of the fact that I was the only speaker at the Medical Society of London who ventured to check the enthusiasm so legitimately excited by the brilliant results in Dr. Foulis's case—a step which received the approval of the President,—I trust you will allow me, in as few words as possible, to lay certain facts before the profession relating to this operation.

The larynx has been extirpated, I believe, thirteen times. In two of the cases the disease for which extirpation was performed was recurrent growth in the larynx, of a non-cancerous nature, and must be eliminated from present consideration, especially that of Dr. Foulis, in which, on grounds far higher than mere success of result, not only the justification, but the actual necessity, of radical measures was clearly established. Ten of the eleven remaining operations were performed on accounts of cancer, and one on account of syphilitic stenosis. In addition, one, if not two cases have occurred of resection of the larynx (as practised by Heine) for the latter disease. Six cases terminated fatally within fourteen days, and no case has been reported as living longer than six months after the operation. Fauvel (Maladies du Larynx, page 717) gives the statistics of 28 cases of cancer of the larynx which he was able to follow to their termination. Of 15 cases of encephaloid disease, 7 not tracheotomised lived an average of three years, 8 tracheotomised lived an average of three years and nine months. Of 13 cases of epithelioma, which is, in truth, the common form of malignant laryngeal disease, 6 patients not tracheotomised lived an average of twenty-one months; while 7 submitted to the same operation lived an average of four years. It has only to be added that this operation renders further operative procedures more safe and easy to justify the remark of Fauvel, that "such a result suffices to demonstrate the *utility*, not to say the *necessity*, of the operation of tracheotomy." It has been stated that cancer of the larynx commences within the cavity, and is limited to that cavity; further, that it is never metastatic; and on this account it is inferred that extirpation of the whole voice-box, if performed early, is likely to be followed by exceptional results, such as non-recurrence. In reply, it must be noted, first, that cancer limited to the laryngeal cavity is very rare, and that its much more frequent origin is by invasion from the pharynx. It will be often, therefore, difficult to limit the extent of the operation to removal of the voice-box. Secondly, that although cancer of the larynx may not be metastatic, glandular infiltration and induration in the immediate vicinity is a very early and, of course, increasing complication. An artificial larynx could be adapted but rarely in the case of a patient after extirpation for malignant disease, and on recurrence it is difficult to believe that the state of affairs is not far worse than after tracheotomy. It was on these grounds that I ventured to limit the justifiability of the operation to such cases as those of Bottini and of Dr. Foulis.

As to syphilis, laryngeal stenosis is a very late symptom of the disease, and only occurs in the very poor, or in those who have so neglected themselves that their whole system has become saturated with the poison. It is not surprising, therefore, to learn that in Heine's cases death took place from relapse of the disease. In resection, death speedily results from that most painful affection, laryngeal perichondritis and caries, a common termination of thyrotomy, and also of crico-thyroid laryngotomy when performed on account of disease which necessitates retention of the tube. I am, Sir, your obedient servant,

LENNOX BROWNE.

Weymouth-street, Portland-place, Jan. 19th, 1878.

To the Editor of THE LANCET.

SIR,—Will you allow me to correct some slight errors in your report of my few remarks concerning the interesting communication of Dr. Foulis, read at the Medical Society of London?

1. I have seen Czerny, and not Langenbeck, perform some of the experimental operations. 2. Czerny did not operate under Billroth's supervision, but quite independently of him. 3. It was Stoerck, and not Czerny, who in 1873 transferred a case of malignant growth of the larynx to Billroth's wards. 4. The person speaking was not Dr. Brandhorst, but, Yours faithfully,

R. C. BRANDER, M.D.

Bentinck-street, Cavendish-square, Jan. 19th, 1878.

J. B.—An Englishman possessing the qualifications mentioned would not have the right to practise as a medical practitioner in the South of France without the consent of the French Government. The following is the existing law on the subject:—"The Government may, if it think fit, accord to a foreign physician or surgeon, a graduate of a foreign university, the right of practising medicine and surgery in the territory of the Republic."

DISLOCATION OF THE SHOULDER DURING EPILEPTIC FITS.

To the Editor of THE LANCET.

SIR,—The letter from Dr. Scatliff in your last number reminds me of two cases of the same kind which had occurred in my practice.

A young lady, aged about thirty, has dislocated her left shoulder seventeen or eighteen times during epileptic fits, at intervals of a few months, the attacks in which the luxation has taken place having been usually at night.

In another case, a man woke in the morning with much pain in one shoulder. On examination it was found dislocated, and the patient thought he "might have had a fit." He had had epileptic seizures previously. Yours &c.,

Castle Cary, Jan. 12th, 1878. C. P. COOMBS, M.D. Lond.

Mr. Fraser.—We entirely agree in the opinion that the domestic education of females for home duties is too much neglected; while attention is directed to the pretended "elevation of woman," which, in fact, means taking her out of her proper sphere, and introducing her to another for which she is constitutionally unfitted. We are obliged for the communication, but have not space to print it.

X.—Marshall; M. Foster; Kirkes.

"OBSTRUCTED LABOUR."

To the Editor of THE LANCET.

SIR,—Writing in your issue of last week, Dr. Munro, of Bradford, details a case of obstructed labour, which is interesting, but by no means easy to understand. "Pendulous abdomen the obstructing cause." "On examination the head of the child was in front of the pubes; the feet high up, and in close apposition with the hands." He then states that what would have been the presenting part in ordinary circumstances, instead of entering the pelvis, had been pressed against the lower part of the spinal column, and in the absence of assistance would have ruptured the uterus. What part was forced against the lower portion of the spinal column? If the breech, would not a very little external manipulation have relieved the obstruction? Yours &c.,

Jan. 21st, 1878. J. R. H.

THE GERMAN GOVERNMENT AND ADULTERATION.

As we informed our readers a few weeks ago, the German Government are preparing an Adulteration of Food Bill, and, with a view of eliciting information on the working of the Adulteration Act in this country, have appointed Dr. Rottenburg to visit London, and submit a series of questions to the Society of Public Analysts. The questions, twenty-seven in number, together with the answers thereto, will be found published in the *Analyst* for the current month. It must have struck the representative of practical Germany with surprise to find that in this country there is no educational test whatever to prove the competency of an analyst, and that anyone, in fact, may assume the title. He must also have been edified to learn the astounding discrepancies of analytical evidence on the quality of suspected articles of food which have been witnessed in our law courts.

ERUPTION FROM BROMIDE OF POTASSIUM.

To the Editor of THE LANCET.

SIR,—The discussion on the 4th inst. at the Pathological Society of London on the Eruption from Bromide of Potassium, mentioned in THE LANCET of last week, induces me to trouble you with a brief description of an eruption of erythema, which attacked a patient at present under my care, and which I believe was caused by bromide of potassium, owing, doubtless, to some idiosyncrasy of the patient.

Towards the end of last month I had occasion to prescribe a mixture containing bromide of potassium and bicarbonate of potash, in ten-grain doses, for a lady, fifty-five years of age, who had been ailing for several weeks previously. When she had taken the mixture about three days, large patches of erythema, well raised from the sound skin, appeared on the back of the right hand and on the ankles of the right foot, and these were soon followed by corresponding patches on the left hand and left ankles. The bromide was stopped, and quinine substituted and taken for four days, when the eruption had so far faded that I ventured to prescribe the bromide again; but under it the dying eruption soon revived, and new patches rapidly appeared, and all caused so much trouble and annoyance that after a few days the bromide had again to be given up, although its administration was necessary from the nature of the lady's symptoms. The eruption is now rapidly disappearing, leaving a peculiar light, bluish, inky discoloration of the skin. The erythema affected the legs and forearms, and no patch reached higher than the knees or elbows, excepting two large, pear-shaped patches, which were situated behind the elbows, and extended an inch or two up the arm. The eruption when at its acme was very profuse, and the patches presented various sizes, from that of a split-pea to a diameter of three inches. On the front of the legs and on the ulnar sides of the forearms were rows of well-formed erythema nodosum, and a large nodule was seated a little to the front of the outside ankle of each foot, which was very painful. On many of the patches and also on the sound skin were papules and small pustules, with acuminated heads, containing more or less serous-looking fluid, which became absorbed, and never broke or formed scabs. A peculiarity in connexion with the eruption was its earlier appearance and greater intensity on the right extremities than on the left. Its colour was also, I think, peculiar, and unlike either erysipelas or any case of erythema which I have seen. It presented shades of a reddish-purple, and many of the patches resembled the deep stain produced by the juice of the brambleberry and mulberry. The eruption was attended with pain and stiffness of the limbs, œdema of the ankles, and some prostration of strength.

I am, Sir, your obedient servant,

Lincoln, Jan. 10th, 1878. WILLIAM O'NEILL, M.D., &c.

R. S. (Worcester) cannot, we think, do better than consult the recently published work of Mr. Rogers Field, to which we referred in our number of December 8th last.

INJECTION OF HOT WATER IN POST-PARTUM HÆMORRHAGE.

To the Editor of THE LANCET.

SIR,—Immediately after reading the report of Dr. Athill's cases in THE LANCET of the 5th inst., I was sent for to attend Mrs. B——, a stout, adipose woman, of thirty, in her third confinement. Her first child was born twenty-eight months ago, after which there was extensive flooding, which lasted over ten days. Her second child was born sixteen months since, when I first attended her. There was detained placenta, which had to be removed. Copious hæmorrhage supervened, which was treated by the application of cold. The loss of blood was so great that recovery was considerably retarded. Her third confinement took place on the 12th inst. The pains were regular; but after the expulsion of the child the uterus ceased to contract. The loss of blood was again very great. I removed the placenta, when for a time it seemed to be arrested; but soon after, as in the former instances, the uterus relaxed, and a continuous trickling of blood began to tell upon the patient's condition; her pulse was small, and she became blanched and faint. From her former experience she greatly feared the shock from the application of cold. I procured a Higginson's syringe, passed the vaginal tube well into the uterus, and injected smartly half a basin of hot water of 110°. Almost immediately the patient declared herself better, and as feeling very comfortable. The pulse immediately improved, the hæmorrhage was arrested, the uterus contracted well, and, after the expulsion of a few clots, all has gone on well up to the present; and, from my former experience with the same patient, I have no doubt that this treatment suited her much better than cold, and that she has been saved from the loss of a large quantity of blood, and her recovery much hastened. From this single experiment I will have no hesitation in again adopting the same means, and I have none in recommending its adoption. Yours &c.,

Belfast, Jan. 13th, 1878. ROBERT EDLIN, M.D.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

THE following were the questions on Surgical Anatomy and the Principles and Practice of Surgery submitted to the candidates for the diploma of membership of the Royal College of Surgeons on Friday, the 18th inst.:—

1. What relations do the median nerve and its branches bear to the principal arteries of the arm, forearm, and hand? What muscles would be paralysed by an injury to this nerve in the arm?
2. Describe the operation of tracheotomy—1st, at the lowest, and 2ndly, at the highest point at which the trachea proper can be opened, mentioning the landmarks which guide the surgeon in the various stages of the operation, and the dangers incidental to it.
3. Give the pathology of the disease which leads to angular curvature of the spine, and the treatment you would adopt for the earlier stages of it.
4. What is ecrecion? Describe the inconveniences attending it, the causes producing it, and the modes of remedying it.
5. Give the diagnosis, treatment, and prognosis of fracture of the surgical neck of the humerus.
6. Describe, first, the symptoms which would lead you to suspect, without local examination, the existence of a strangulated rupture, and then the characters which such a tumour would present.

The candidates were required to answer at least four (including one of the first two) out of the six questions.

The following were the questions on the Principles and Practice of Medicine submitted to the candidates on Saturday, the 19th inst.:—

1. What are the various causes of ascites? what are the symptoms which it produces? how would you recognise its presence, and distinguish it from cystic diseases within the abdomen? and how would you treat it?
2. Discuss the morbid anatomy, symptoms, and treatment of tubercular meningitis.
3. What are the several officinal preparations of the following drugs, and what their properties and doses?—Magnesia, arsenic, senna, rhubarb, colchicum, conium. Write out in full a prescription for an adult requiring a diuretic medicine.

Rallius.—Rutherford's Practical Histology, 6s.; Huxley and Martin's Elementary Biology, 7s. 6d.

Mr. John Thomson should address the lecturer, to whose course his objection relates, privately.

THE "PRELIMINARY CARD."

To the Editor of THE LANCET.

SIR,—Will you allow me to point out what is generally considered to be a most troublesome piece of red-tapeism at the College of Surgeons?

A registure at the General Medical Council as a student. He may or may not have passed a preliminary examination; in the latter case he exhibits other proof of the necessary attainments. Wishing to present himself at the College of Surgeons' primary, he is told he must produce a "preliminary card." He does not possess one, and so tenders his certificate of registration at the Medical Council. This the College considers insufficient proof, and he is politely informed he must produce the documents he laid before the Council. Now, the attainments for the primary membership of the College of Surgeons are similar to those required by the Council previous to registration. Therefore the matter can only be considered in one of two lights—1st, that the Council is competent to judge of the qualifications of a student; 2nd, that it is an incompetent judge. In the former case the production at the College of Surgeons of proof laid before the Medical Council is nothing but red-tapeism. In the latter case the registration power of the Medical Council should be abolished. The abolition of registration by the College of Surgeons was a step in the right direction. Let it make one step more, and admit to their primary membership all registered medical students. Do not think that I would wish the College of Surgeons to lower the standard of its examinations; but I think that all mere formality should be avoided. The comparison may be odious; but under the present system the College appears to be the original "circumlocution office."

Yours &c.,

January, 1878. ICONOCLAST.

Medical Ethics.—We do not see anything in the statement of our correspondent which leads us to alter the opinion we expressed last week. Let our correspondent ask himself how he would like an assistant of his to act as he is acting towards his late principal. Would he not guard himself against such conduct by a written contract? There is no written contract to hinder him. But we think the very fact that he was trusted to act in the usual way is a strong reason for doing so. There is more ingenuity than force in the argument that, as his late partner's interests are presumably protected by the terms of the disposition, he can do nothing against them, and cannot be expected to consider the interests of anyone else. But he is expected to do so. All honourable men will expect him to act as he would like others to act towards himself, and as he would undoubtedly have had to act if his late principal had not trusted him so much as to neglect the ordinary precautions. We think that our correspondent has forgotten the ethical principles which underlie the relation of principal and assistant.

Dr. Uccio Raphael is thanked.

APO-MORPHIA.

To the Editor of THE LANCET.

SIR,—I should feel obliged if some of the numerous readers of your valuable journal would give me their experience in the use of the hypodermic injection of apo-morphia as an emetic, and whether any ill-effects ever arise from its use. I am, Sir, yours &c.,

Jan. 21st, 1878. AN ENQUIRER.

SANITATION IN TOTTENHAM.

To the Editor of THE LANCET.

SIR,—In reference to a paragraph in your issue of the 12th inst., relative to the Tottenham Board of Health, will you allow me to state that the facts are the reverse of what is stated. Some ventilators blocked up during the repairs of a road for a few days, instead of weeks, were opened expressly by order of the Board as soon as they heard of the occurrence. No outbreak of fever followed. As a matter of fact, additional ventilation by means of shafts was in preparation, and even in erection at the time. Cases of fever occurred in other parts of the parish where numerous ventilators existed. Here also additional shafts were erected by the Board, not at the instigation of any association, but on the report of the surveyor. As far as this part of the parish is concerned, the measures taken by the Board during the past five years have almost banished typhoid fever, which at that time was never absent. The tone of the reports of the Sanitary Association has perhaps misled you. Like the celebrated fly in the chariot, they claim the credit of all the work which has been done, not by them, but by the only Board probably in England which employs two medical men to look after the health of one parish. To the latter gentlemen, perhaps it might be suggested, some of the improvements, which you can glance at in the accompanying paper, are, at least in some degree, due.

I am, Sir, yours &c.,

C. T. CONOLLY,
One of the Medical Officers of Health.

Wood-green, Jan. 23rd, 1878.

*** We have also received a communication from the Clerk of the Tottenham Local Board of Health, containing a copy of a resolution of the Board, giving a general "unqualified denial to the statements made in the said article."—ED. L.

COMMUNICATIONS, LETTERS, &c., have been received from—Mr. F. Mason, London; Dr. Brown-Séquard; Sir H. Thompson, London; Dr. Foulis, Glasgow; Dr. B. Foster, Birmingham; Mr. R. Harrison; Mr. Thomas, Horsham; Dr. W. Alexander, Liverpool; Mr. G. D. Thomas, London; Mr. Conolly, Wood-green; Dr. Thomson, Hackney; Dr. Dickinson, London; Mr. Street, Merriott; Messrs. Moore and Co. Philadelphia; Messrs. Appleton and Co., New York; Mr. Phillips, London; Mr. Clarke, New York; Dr. Rohefs, Gottingen; Messrs. Sutton & Sons, Reading; Mr. Fennell, Portsmouth; Dr. Warren, Skye; Mr. Edgill, Manchester; Mr. Pitts, Hemel-Hempstead; Mr. Adams, Ashburton; Mr. Evans, Rhayader; Mr. Wigner, London; Mr. Drinkwater, Sunderland; Mr. Morton, Kennington; Dr. Clark, Lichfield; Mr. Farrar, Morecambe; Dr. Ulecia, Madrid; Dr. Coats, Glasgow; Dr. Agnew, Hobart Town; Mr. Rice, Plumstead; Mr. Munro, Forres; Dr. Norris, South Petherton; Mr. Custance, London; Mr. Lennox Browne, London; Mr. Pearson, London; Dr. Brandeis, London; Dr. Craig, Bedford; Mr. Eyre, London; Mr. Allen, Liverpool; Dr. Carpenter, Stockwell; Mr. Cragie, London; Dr. Munroe, Bradford; Mr. Browne, Tottenham; Dr. Stowers, London; Mr. Crowder, London; Mr. Howie, Alyth; Dr. Atthill, Dublin; Mr. Kemp, Exeter; Mr. Barr, Liverpool; Dr. Cambell, Hunslet; Mr. Harrison, Sheffield; Mr. Hookham, Birmingham; Mr. Procter, Shifnall; Mr. Oldham, Liverpool; Mr. Howard, London; Dr. Muir, London; Mr. Steele; Mr. Jones; Mr. White, Norwich; Dr. Foster; Mr. Parker, Birmingham; Dr. Prosser James, London; Mr. Dale, King's Lynn; Dr. Aikman, Guernsey; Mr. Lyster, Liverpool; Mr. Duke, Ashburton; Mr. Ramson, London; Mr. Rowell, Clapham; Mr. Wilson, Hammersmith; Dr. Tatham; Mr. Sequeira, London; Mr. Kebbell, Flaxton; Mr. Moreton, Carlow; Mr. Gibson, Edinburgh; Mr. Bacon, Cambridge; Mr. Street, London; Mr. Pike, Gloucester; Mr. Nicroth, London; Mr. Burgoyne; Mr. Wheeler, Manchester; Messrs. Smith and Son, Dublin; Mr. Cannon, London; Mr. Dickson, Bootle; Medical Ethics; An Enquirer; D. R.; J. R. H.; Physician; J. B.; Poor-law Medical Officer; X.; J. S. G.; C. H. P.; Alpha; A Victim to Good Nature; Ease; &c. &c.

LETTERS, *each with enclosure*, are also acknowledged from—Mr. Harold, Hinckley; Mr. H. Sergeant, London; Mr. Bradshaw, Nottingham; Mr. Mitchell, Pitlochry; Mr. Humphreys, Montgomery; Mr. Collet, Worthing; Messrs. Ferris and Co., Bristol; Messrs. Porteous and Co., Glasgow; Dr. Philpots, Poole; Dr. Clark, Folkestone; Messrs. Daniel, St. Leonard's; Mr. Walford, Ramsgate; Messrs. Gostling and Co.; M. Charlier, Quangnow, Belgium; Mr. Newman, London; Mr. White, London; Mr. Price, Brecon; Dr. Popham, Market-Drayton; Mr. Fraser, Clitheroe; Mr. Brown, Handsworth; Mr. Field, London; Dr. Squire, London; Dr. Habershon, London; Mr. Ward, London; Mr. Swinhoe, Swindon; Mr. Hastings, London; Mr. Boller, Harrogate; Dr. Ellery, Plympton; Mr. Lakin, Burton-on-Trent; Mr. Sully, Barrowden; Mr. Baird, Congleton; Dr. Tilbury Fox, London; Dr. Sturges, London; Mr. Joy, Bayswater; Mr. Davies, Cardigan; Dr. Noad; Mr. Pierce, Burnham; Messrs. Cadbury Brothers; Mr. Mackenzie, Middlesborough; J., Oldham; M. D., Cromer; M. R. C. S., Shipston-on-Stour; Linacre; Medicus, Rumsey; W. F. D., Empingham; Medicus, Manchester; C. D., London; Meta; M. B., Rotherham; J. R. S.; F. C. S., St. Peter's; A. M., Hemel-Hempstead; J. C. H., Denmark-hill; R. S., Whitechapel; J. S., Denmark-hill.

Yorkshire Post, Manchester Courier, Hornet, Larys Advertiser, Cambridge Independent, Cheltenham Examiner, Tottenham Weekly Herald, Manchester Evening News, Bolton Daily Chronicle, Hampshire Telegraph, Home Chronicle, British Architect, Students' Journal, Evening Star, Otago Daily Times &c., have been received.

METEOROLOGICAL READINGS.

(Taken daily at 8 a.m. by Steward's Instruments.)

THE LANCET OFFICE, JAN. 24TH, 1878.

Date.	Barometer reduced to Sea Level, and 32° F.	Direction of Wind.	Wet Bulb	Dry Bulb	Solar Radia in Vacuo	Max. Temp Shade	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
Jan. 18	30·50	N.W.	37	39	..	44	36	..	Foggy
,, 19	30·52	S.W.	39	41	..	47	36	..	Foggy
,, 20	30·38	S.W.	43	46	..	52	39	..	Cloudy
,, 21	30·14	S.W.	50	52	..	56	44	..	Overcast
,, 22	30·01	S.W.	52	54	..	56	51	0·09	Overcast
,, 23	29·82	N.W.	38	42	..	46	40	0·07	Fine
,, 24	29·55	N.W.	36	39	..	46	34	0·01	Cloudy

Medical Diary for the ensuing Week.

Monday, Jan. 28.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS. — Operations, 10½ A.M. each day, and at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M. each day, and at the same hour.
ST. MARK'S HOSPITAL.—Operations, 9 A.M. and 2 P.M.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
LONDON HOSPITAL.—Operations, 1½ P.M.; on Wednesday, 2 P.M.; on Thursday, 1½ P.M.; and on Saturday, 2½ P.M.
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Professor Erasmus Wilson, "On Dermatology."
MEDICAL SOCIETY OF LONDON.—8½ P.M. Dr. Leared: "Death in Typhoid Fever averted by the free use of Stimulants."—Dr. Dowse, "On Hereditary Syphilis as it affects the Brain and Nervous System."

Tuesday, Jan. 29.

GUY'S HOSPITAL.—Operations, 1½ P.M., and on Friday at the same hour.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 3 P.M.
ROYAL INSTITUTION. — 3 P.M. Professor Garrod, "On the Protoplasmic Theory of Life, and its bearing on Physiology."

Wednesday, Jan. 30.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
ST. BARTHOLOMEW'S HOSPITAL. — Operations, 1½ P.M., and on Saturday at the same hour.
ST. THOMAS'S HOSPITAL. — Operations, 1½ P.M., and on Saturday at the same hour.
KING'S COLLEGE HOSPITAL. — Operations, 2 P.M., and on Saturday at 1½ P.M.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL. — Operations, 2 P.M., and on Saturday at the same hour.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN. — Operations, 2½ P.M.
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Professor Erasmus Wilson, "On Dermatology."

Thursday, Jan. 31.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL. — Operations, 2 P.M., and on Friday at the same hour.
ROYAL INSTITUTION. — 3 P.M. Professor Dewar, "On the Chemistry of the Organic World."

Friday, Feb. 1.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Professor Erasmus Wilson, "On Dermatology."
ROYAL INSTITUTION.—8 P.M. Weekly Meeting.—9 P.M. Mr. W. H. Preece: "The Telephone."

Saturday, Feb. 2.

ROYAL FREE HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—3 P.M. Mr. R. Bosworth Smith, "On Carthage and the Carthaginians."

NOTICE.

In consequence of THE LANCET being frequently detained by the Post Office when posted for places abroad *more than eight days after* publication, subscribers and others are reminded that such copies can be forwarded only as book packets, and *prepaid* as such.

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